

# THE ARCHITECT & BUILDING NEWS

29 SEPTEMBER 1955 · · · VOL. 208 · · · NO. 13 · · · ONE SHILLING, WEEKLY

- VALE OF LEVEN HOSPITAL, ALEXANDRIA,  
DUNBARTONSHIRE
- CURRENT MARKET PRICES

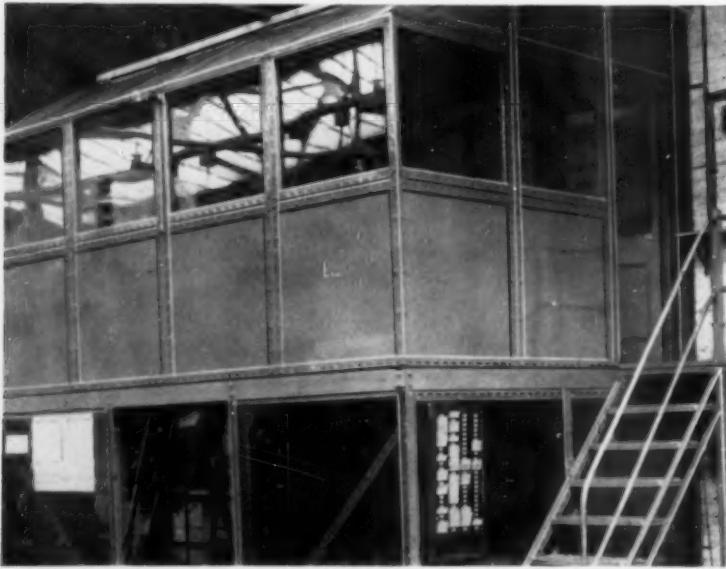
PUBLISHED IN LONDON SINCE 1854

# IT PAYS TO THINK OF DEXION

*- at the planning stage*



**Service Depot builds storage platform.** Iron Bridge Service Depot Ltd. of Southall, Middlesex, built this overhead storage platform to carry 20 tons of motor-car parts. It effects a big saving in space, and the supports also serve as dividers for storage bins. Storage structures of Dexion can make full use of any existing space; and they have the great advantage of ensuring easy adaptability to changing needs.



**Machine Shop Engineer's office quickly built.** Thomas Allan & Sons Ltd. of Thornaby designed this office with tool store underneath to be built with conventional materials. They used Dexion instead when they found it was quicker and cost less. In jobs of this sort, Dexion invariably supersedes old-fashioned materials and methods.

A FACTORY LAYOUT must be flexible, capable of being adapted at short notice to changing circumstances. This applies particularly to storage requirements and works equipment.

There is no more versatile material for building stores and equipment, exactly to your own designs, than Dexion Slotted Angle. Such Dexion equipment is quick and cheap to install. And any Dexion structure can be readily adapted and altered to meet changing needs. There is no waste, no scrap: Dexion is fully recoverable, and can be used again and again.

When you are planning the building and layout of a factory, Dexion deserves careful consideration at an early stage. This versatile material may bring about important economies, initially and for years to come.

A technical design and estimating service is available free; and for large installations, construction teams will carry out the work if required.

## GET THE FACTS

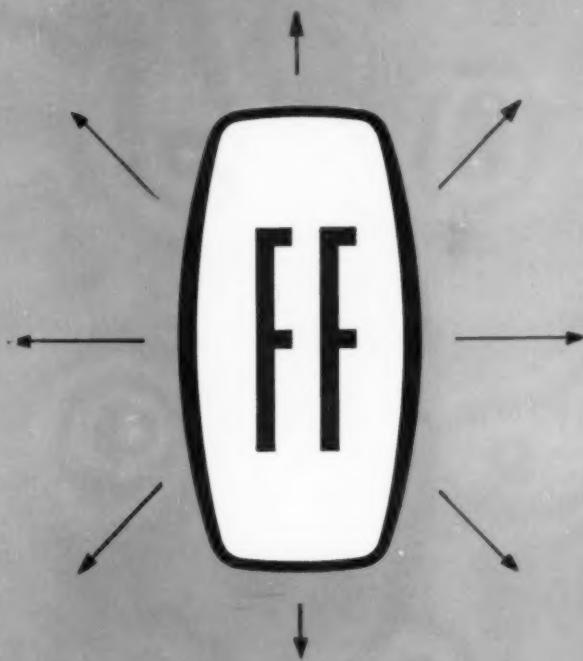
Dexion 225 is sold in packets of ten 10-ft. lengths, complete with bolts. Steel Dexion (price from 1/3½ to 1/5 per foot) is rust-protected, stove-enamelled. Where a light but strong, non-magnetic, non-corroding material is required, use Alloy Dexion (full technical details and prices on request). Send today for sample piece of Dexion and illustrated booklet AN.144 showing many uses in industry. Dexion Ltd., 65 Maygrove Rd., London, N.W.6. (Telephone MAIda Vale 6031-9.)



# DEXION

REGD.

SLOTTED ANGLE



## DOMESTIC SOLID FUEL APPLIANCES



GRANGE-CAMELON IRON COMPANY LIMITED, FALKIRK  
A FEDERATED FOUNDRIES COMPANY

SERVITOR  
COOKER

SOFONO  
COOKER

ENSIGN  
COMBINATION GRATE

SOFONO FIRE  
WITH SURROUND

SOFONO  
LO-FRONT FIRE

SOFONO  
DROP FRONT FIRE

SWIFT  
STAND-IN FIRE

SUMMIT  
UNDER-FLOOR FIRE

SOFONO-SUNRAY  
HOMEHEATER

SOFONO STOVES  
No.1 & 2; 3, 4 & 5

SOFONO  
CONVECTOR FIRE

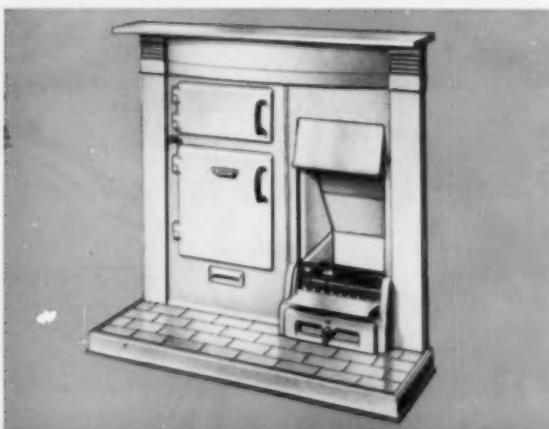
CAMELON  
CONVECTOR FIRE



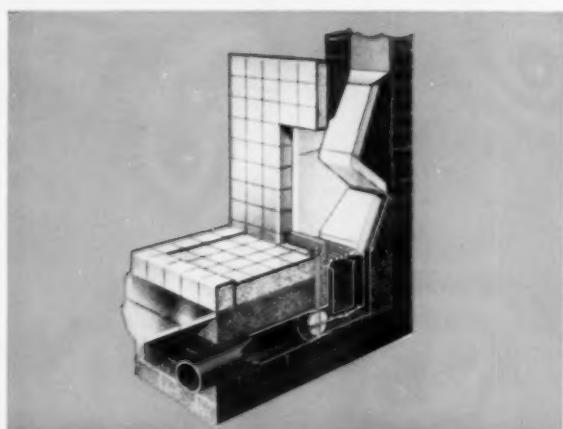
**THE SOFONO COOKER**  
F.S. Open Fire Cooker and Waterheater.



**THE SERVITOR COOKER**  
Fully insulated F.S. Cooker and Waterheater.



**THE ENSIGN Combination Grate**  
Inset Cooker with patent all night burning fire.



**SUMMIT Fire**  
Underfloor air fire which converts smoke to flame.



**SOFONO Convector Fire**  
Ducts take warmed air from the fire to 2/3 rooms.



**CAMELON Convector Fire**  
2 types — under and over-floor air models.



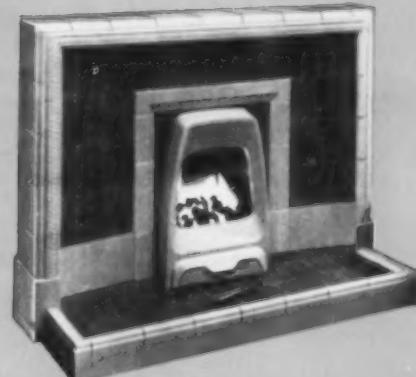
**SOFONO-SUNRAY Homeheater**  
A contemporary appliance, free standing or inset.



**SOFONO Stove Nos. 3, 4 & 5**  
Closed stove with convection side panels optional.



**SOFONO Stove Nos. 1 & 2**  
An inexpensive all-purpose stove in 2 sizes.



**SWIFT Stand-In Fire**  
Fully open fire with advantages of a closed stove.

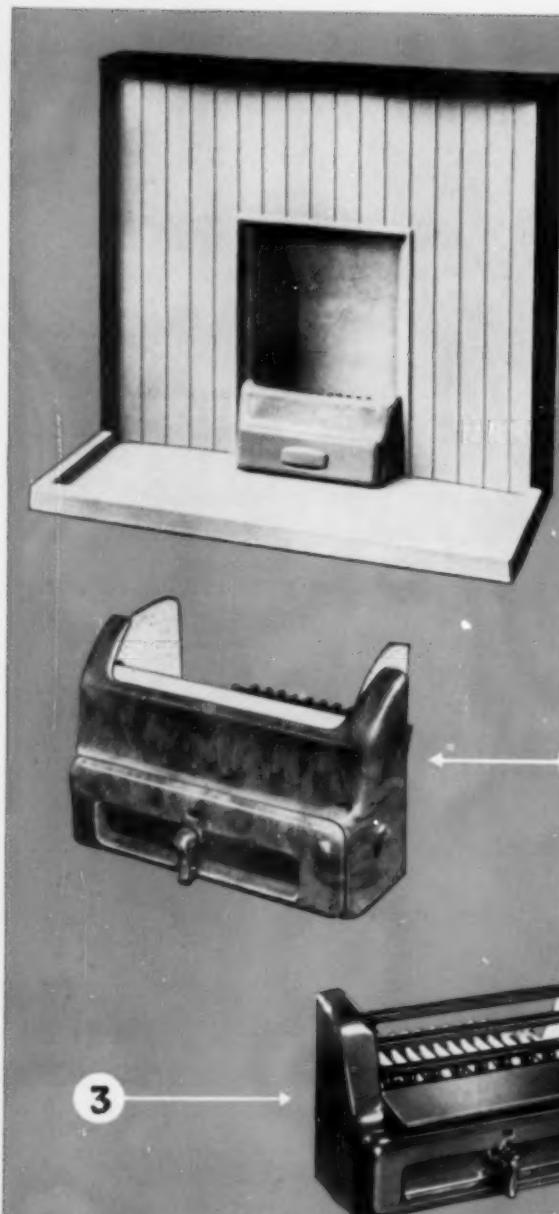
## DISPLAY AND ADVERTISING MATERIAL

To help your sales, a variety of attractive display material is available on request to our local representative or Head Office in Falkirk. The display material includes Electric Liquid Light signs, window showcards and bills in addition to leaflets.

For your own press or catalogue advertising, electros or stereos of the appliances are available on loan.



**GRANGE-CAMELON IRON COMPANY LIMITED, FALKIRK**  
**A FEDERATED FOUNDRIES COMPANY**



## THE POPULAR RANGE OF **SOFONO FIRES**

1

### **SOFONO LO-FRONT with SURROUND**

Illustration shows the Lo-Front Fire fitted into the new vitreous enamel surround. The Lo-Front Fire is in 4 sizes, 12", 14", 16", 18".

The Surround, which is available in five colours, is completely suitable for installation with any type of 16" Sofono Fire.

2

### **SOFONO ORIGINAL**

The famous all night burning fire in 12", 14", 16", 18" sizes to fit most fireplaces. All Sofono Fires are available in a wide variety of colours in lustrous or vitreous enamels.

3

### **SOFONO DROP-FRONT**

This popular model, also continuous burning, gives excellent radiation into the room and the novel drop front can also serve as a trivet. In sizes 14", 16", 18".

MANUFACTURERS



**GRANGE-CAMELON IRON COMPANY LIMITED, FALKIRK**  
A FEDERATED FOUNDRIES COMPANY

**HYDRALIME + SAND +  
BLUE CIRCLE  
PORTLAND CEMENT =**

*the ideal mortar for brickwork, masonry  
and internal plastering.  
It has stood the test of time*

**HYDRALIME**  
THE SCIENTIFICALLY HYDRATED LIME  
and  
**BLUE CIRCLE PORTLAND CEMENT**

Recommended mixes, based on Codes of Practice prepared by a Committee convened by the Royal Institute of British Architects on behalf of the Codes of Practice Committee, available from

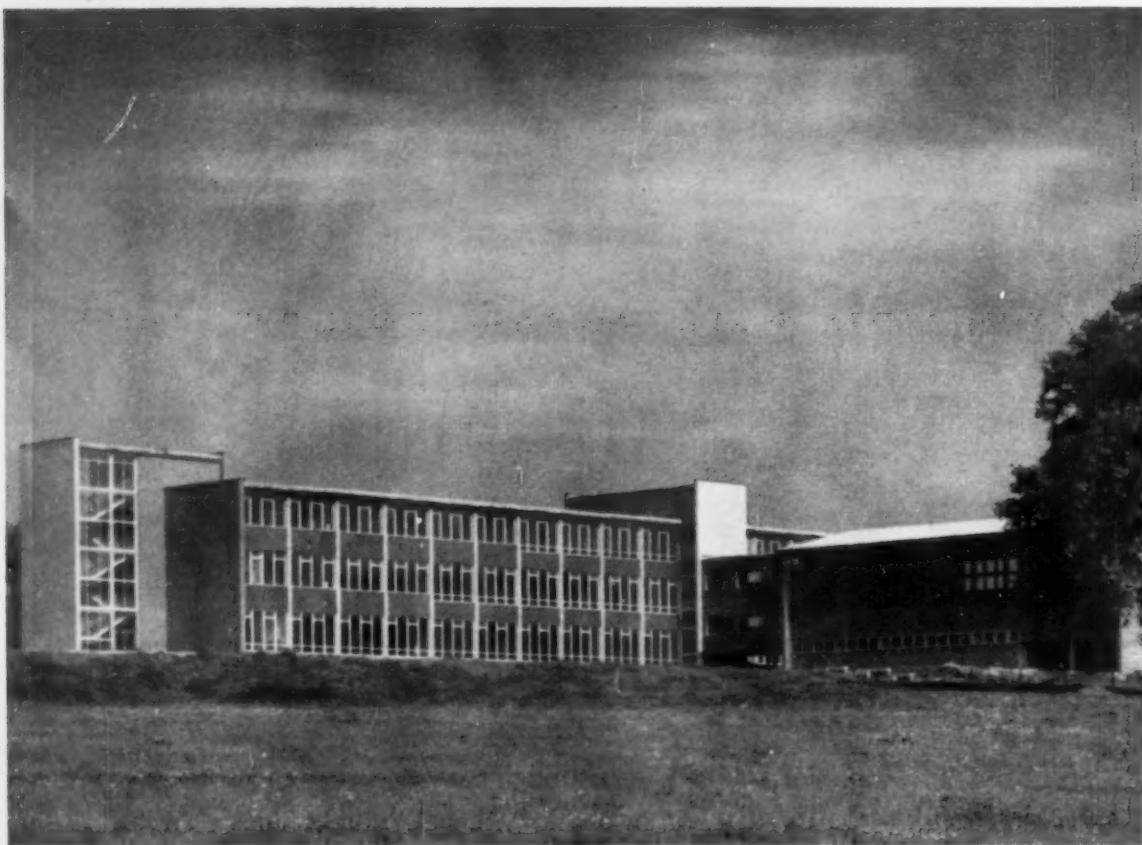


THE CEMENT MARKETING COMPANY LTD.,  
PORTLAND HOUSE, TOTHILL STREET, S.W.1.



BRITISH CEMENT IS THE CHEAPEST IN THE WORLD

H.3



Architect: C. G. Stillmar, Esq., F.R.I.B.A. Chief Architect to the Middlesex County Council.

## Joel Street School Northwood Hills.

This modern school was recently completed for the Middlesex County Council and provides facilities for some 600 pupils. The main structure has a reinforced concrete frame, brick flank walls in multi-coloured facings, and curtain wallings of plastic sheeting retained by aluminium angles. Portland Stone wing walls run to the full height of the building at main staircases. Interior fitments in oak and teak were made by our Joinery Department.

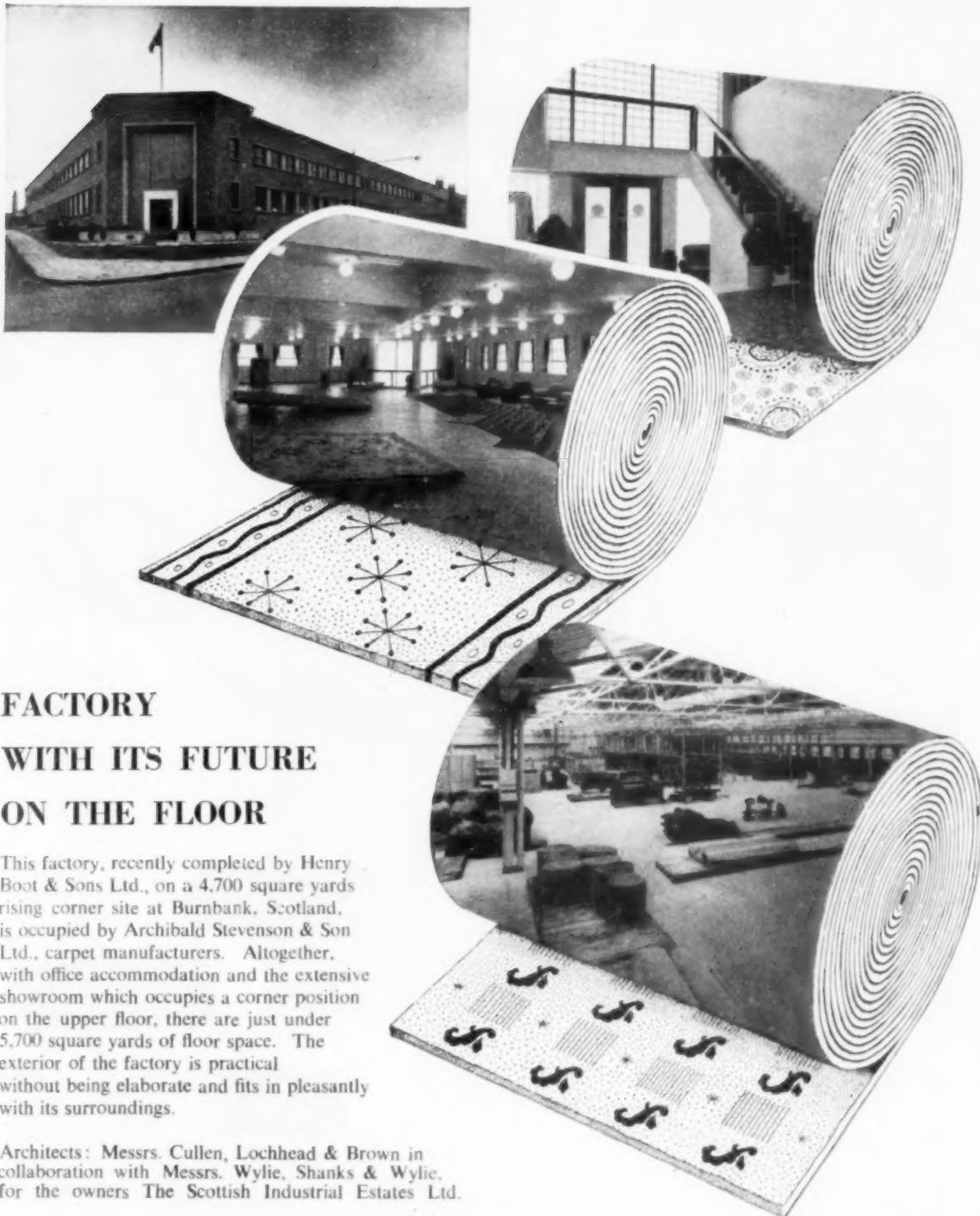
The pitched reinforced concrete roof of the gymnasium has a 40-foot clear span. Science and physics laboratories provide students with individual work-bench space fitted with power, light, gas and water, all under master control.

ENGLAND · SCOTLAND · OVERSEAS

HOLLAND & HANNEN AND CUBITTS LIMITED · ONE QUEEN ANNE'S GATE · WESTMINSTER · S.W.1

TGA. C178

NOW, AS IN THE PAST  
**CUBITTS**  
BUILD FOR THE FUTURE



This factory, recently completed by Henry Boot & Sons Ltd., on a 4,700 square yards rising corner site at Burnbank, Scotland, is occupied by Archibald Stevenson & Son Ltd., carpet manufacturers. Altogether, with office accommodation and the extensive showroom which occupies a corner position on the upper floor, there are just under 5,700 square yards of floor space. The exterior of the factory is practical without being elaborate and fits in pleasantly with its surroundings.

Architects: Messrs. Cullen, Lochhead & Brown in collaboration with Messrs. Wylie, Shanks & Wylie, for the owners The Scottish Industrial Estates Ltd.

# Henry Boot

AERODROMES · HOUSING ESTATES · ROADS  
RAILWAYS · WATER DISTRIBUTION SCHEMES  
BUILDING PROJECTS OF EVERY DESCRIPTION

HENRY BOOT & SONS LTD · BANNER CROSS HALL · SHEFFIELD 11

IB

**Have you thought of PLYWOOD?**

Do you know what modern plywood can do—how to specify, how to use it? If you are still "tea-chest" minded it's time you got in touch with T.D.A.

**there is****nothing****like**

ISSUED BY

THE TIMBER DEVELOPMENT ASSOCIATION LIMITED,  
21 COLLEGE HILL · LONDON · E.C.4

and branches throughout the country.



TDA 7084

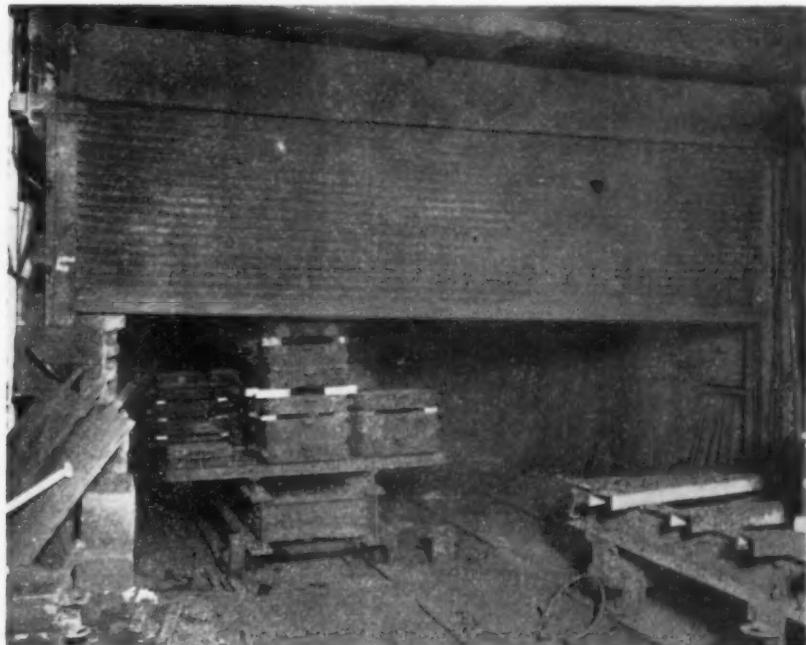
ARTHUR L. GIBSON & CO. LTD., TWICKENHAM, MIDDX.

we have a door . . . . .

a door for everyday general use, designed to serve in openings that require a good closure, and to give a long service life with minimum maintenance costs. The door is a Kinnear rolling steel shutter. In the illustration a Kinnear shutter has been used as the door to a mould drying stove at Cardiff.

Tailored to exact requirements a Kinnear Steel Rolling Shutter will ensure economy of installation, trouble free operation whilst giving complete protection against intruders and the weather.

JOHN WILLIAMS AND SONS



When it comes to saving ways in doorways it is a wise move to call in Kinnear.

**KINNEAR** SHUTTERS AND GRILLES



See-

## HOW THE SCENE CHANGES

*Garage with conventional lighting. Note the confusion of beams, pipes, trunking, wiring and light fittings.*



*The same garage after modernising with a LUMENATED CEILING.*

*Write for your copy of "LUMENATED CEILINGS", an illustrated brochure giving full details of this new lighting technique.*

When modernising old premises or building new ones, you can make lighting an integral part of design by installing a LUMENATED CEILING, a new lighting technique combining light source and ceiling in one. The whole interior of shops, offices and showrooms is diffused with a pleasant, efficient light of uniform intensity without shadow, glare or 'high spots'. The LUMENATED CEILING overcomes many design problems

by effectively screening overhead pipe work, ventilation trunking and other unsightly projections.

#### SAVING IN MAINTENANCE COSTS

The surface of the LUMENATED CEILING is a durable, finely corrugated plastic material, specially treated to repel dust. It is non-inflammable, can be easily cleaned and kept in perfect condition with the minimum of attention.

# LUMENATED CEILINGS LIMITED

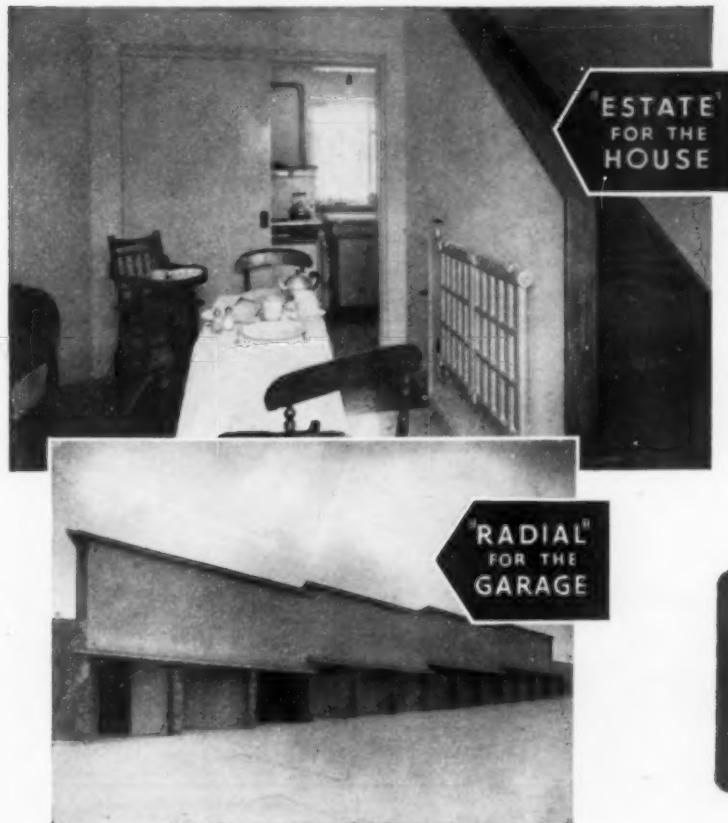
LONDON OFFICE: 4 LLOYDS AVENUE, E.C.3. TEL: ROYAL 1927

HEAD OFFICE: THERMOTANK LTD., HELEN STREET, GLASGOW

South African Company: Thermotank S.A. (Pty.) Ltd., Simmonds and Godfrey Street, Johannesburg.



TGA 17



# ELLARD

## SLIDING DOOR GEAR

FOR  
HOUSING  
ESTATES

FOR THE  
PRIVATE  
RESIDENCE



ELLARD Sliding Door Gear is ideally suited for use on large housing estates and for the distinctive private residence. ELLARD "Estate" Gear is silent—easy running—troublefree, and has elegant appearance. ELLARD "Radial" Gear for garages and out-houses, provides smooth-running action, gives maximum space, and is easy to fix. Both these well-known types of ELLARD Door Gear are moderate in price and immediate delivery can be obtained from large ironmongers and builders' merchants throughout the country.

**CLARKE ELLARD ENGINEERING COMPANY LTD**  
WORKS ROAD · LETCHWORTH · HERTFORDSHIRE

TELEPHONE 613/4

**NO CAULKING —  
FIXED WITH A SPANNER**

Here is a new development in soil pipe erection to cut labour costs, erection time and give long service with the minimum maintenance.

A wide range of soil pipe fittings are available embodying the well-known "Kontite" principle, made from Cast Gunmetal and suitable for tubes of 3½ in. diameter upwards.

Write for catalogue to-day.

**ECONOMY**  
**EASE OF ASSEMBLY**  
**EFFICIENCY**

**Kontite**

cast gunmetal

**KAY & COMPANY (ENGINEERS) LTD., BOLTON BRASS WORKS BOLTON**  
Tel. Bolton 197 Grams. 'Kontite' Bolton. London Office 36 VICTORIA ST. Tel. ABBEY 2146. Grams. 'Kontite' Sowerby, London

**Quick, Accurate,  
Foolproof!**

The

**COWLEY**  
**Automatic** **LEVEL**

gives you accurate levelling in a matter of seconds over distances from 6" to 150', with an accuracy of  $\frac{1}{4}$ " at 100'. Simple, robust and compact, the Cowley Level will go anywhere, needs no setting-up or skilled operation, and will take any amount of hard usage. Ask your supplier for a demonstration or complete the attached coupon.

**£16**

Instrument with  
tripod, staff  
and target.

**COWLEY LEVEL DEPT.**  
**HILGER & WATTS LTD.**  
48 Addington Sq., London, S.E.5.



<input type="checkbox"/> Please forward literature	<input type="checkbox"/> Arrange a demonstration at no obligation to myself
<input type="checkbox"/> Send me address of nearest stockist	
Please mark appropriate square and send to: <b>COWLEY LEVEL DEPT., HILGER &amp; WATTS LTD., 48 Addington Sq., S.E.5.</b>	
NAME _____	
ADDRESS _____	

A.B.N.



***'Don't you  
dare tread  
on them  
there steps!'***

Fair warning, after all the trouble she's taken—including all those journeys to the tap for fresh water. A constant supply of water is something she takes for granted. She doesn't give a thought to the pipes which bring it to her. The chances are they're made of copper, the metal so eminently suitable for the purpose.

Light-gauge copper tubing for water and waste services made to British Standards by I.C.I. Metals Division is neat, smooth-bored, economical, easily manipulated and durable.

The consistently high demand for I.C.I. light-gauge copper tubing is ample evidence of its quality and reliability—the outcome of many years' production experience, coupled with rigid technical control.

IMPERIAL CHEMICAL INDUSTRIES LTD.,  
LONDON, S.W.1



**COPPER TUBES  
FOR TROUBLE-FREE  
WATER SYSTEMS**

M363



Defeat the worst weather with

# RELIABLE

PAINTS AND  
ENAMELS



TRADE MARK  
SHIP BRAND

Protect and  
beautify  
with a  
long-lasting  
finish —  
that defies  
the worst  
elements for  
years ahead !  
Most durable  
for all  
outside work

**JOHNSON BROTHERS LTD.**  
HULL · LONDON · GLASGOW · NEWCASTLE

In FACTORY..



FLAT..



or FARMHOUSE..



## SISSENS SINKS TO SUIT YOUR PLANS

Choose from a wide range of standard models or have  
sinks made to your own specifications



Illustrated here is a  
round bowl unit which  
is 3 ft. 6 ins. x 1 ft. 9 ins.,  
with right or left hand bowl  
17 ins. top dia. x 7½ ins. deep.

Other units incorporate the normal  
rectangular type bowl. Many designs are available  
together with attractive wooden under-cabinets beauti-  
fully furnished either in cream enamel with various  
coloured handles to match individual schemes, or  
modern light oak.



W. & G. SISSENS LTD., ST. MARY'S ROAD, SHEFFIELD 2. Tel. 22118. Workers in metal since 1784

**Sissons**  
STAINLESS STEEL SINKS

Models may be seen at the Building  
Centre, Conduit St., London W.1.

O/A/30~

CAST IRON  
**storage  
tanks**

A Mather & Platt tank of  
80,000 gallons capacity erected at a  
R.A.F. station



- ★ Erected from standard size plates
- ★ Inside or outside flanges
- ★ Universal brackets and stay rods ensure complete rigidity
- ★ Standard jointing compound gives watertight joints
- ★ Sound design gives easy erection and years of trouble-free service

**Mather & Platt Ltd.**

**P A R K   W O R K S   •   M A N C H E S T E R   1 0**

Park House • Great Smith Street • London, SW1

Specify ...



**ALUMELL**

DOUBLE PATENT GLAZING  
FOR THERMAL INSULATION



Photo by courtesy of Messrs.  
C. A. Parsons & Co. Ltd.,  
Heaton, Newcastle-on-Tyne

MELLOWES & CO. LTD.

SHEFFIELD • LONDON • OLDHAM

*It depends on the length of the pipe*



A long run wastes heat and fuel. G.E.C. water heaters are designed for installation close to the tap and are so well lagged that, when no water is being drawn off, the water stays at the desired temperature for many hours, *without any further use of fuel*.

This means that G.E.C. electric water heaters provide the most economical form of water heating you can use.

Consider too, these further advantages:—

- \* No fuel storage problems
- \* No costly fumes or dirt
- \* No stoking
- \* Low maintenance costs
- \* Easy to install

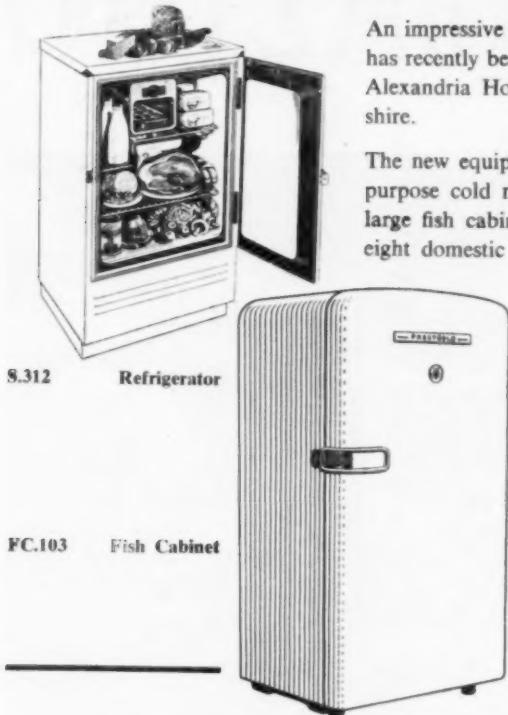
The G.E.C. has long specialised in industrial water heating equipment. Expert advice on equipment is readily available at all times.



**G.E.C.** INDUSTRIAL ELECTRIC WATER HEATERS

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, W.C.2.

## a PRESTCOLD installation in a modern hospital



An impressive installation of Prestcold equipment has recently been carried out by Wm. Kemp at the Alexandria Hospital which serves all Dunbartonshire.

The new equipment includes a 400 cu. ft. general purpose cold room, two mortuary cold rooms, a large fish cabinet, a frozen food conservator and eight domestic type refrigerators.

CC.60  
Frozen Food Conservator

*Here is yet another example in the wide range of Prestcold products in the service of the community*

**Wm. KEMP & Co. (Refrigeration) Ltd.**  
76, Dundas Street, Glasgow, C.1

Telephone Douglas 8061-2-3

---

**ALEXANDRIA HOSPITAL · DUNBARTONSHIRE**

---

**SANITARY FITTINGS &  
ALL PLUMBING MATERIAL  
SUPPLIED BY ...**

**THOMAS GRAHAM & SONS, LTD.**  
32/44 ST. ANDREWS SQUARE, GLASGOW

PHONE BELL 4711 (10 LINES)

TELEGRAMS "TEGRAM" GLASGOW

---

# PATENT GLAZING



*Interior View of Factory*

This is a modern factory for wool spinning and the process calls for fairly high humidity together with controlled temperature.

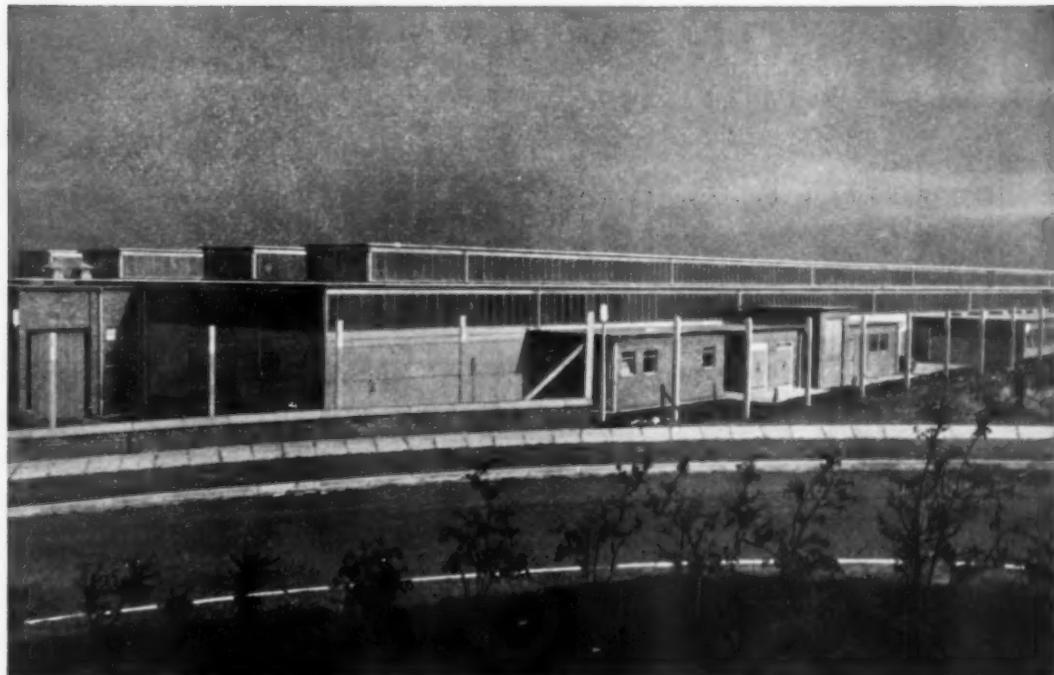
DOUBLE PATENT GLAZING was used to minimize the possibility of fluctuation in temperature through heat losses and also to avoid the excessive condensation

which would otherwise occur under such conditions.

The thermal insulating and other special properties of double patent glazing enabled the Architects to air-condition the factory and thus achieve the most advantageous working conditions both for the process and the operatives.

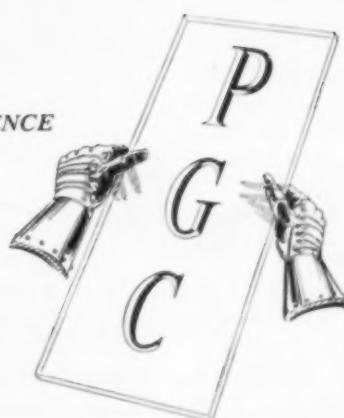
# SPECIFICATIONS

**DOUBLE PATENT GLAZING IN THE NEW  
JEREMIAH AMBLER FACTORY AT PETERLEE FOR  
THE NORTH EASTERN TRADING ESTATES LTD.**



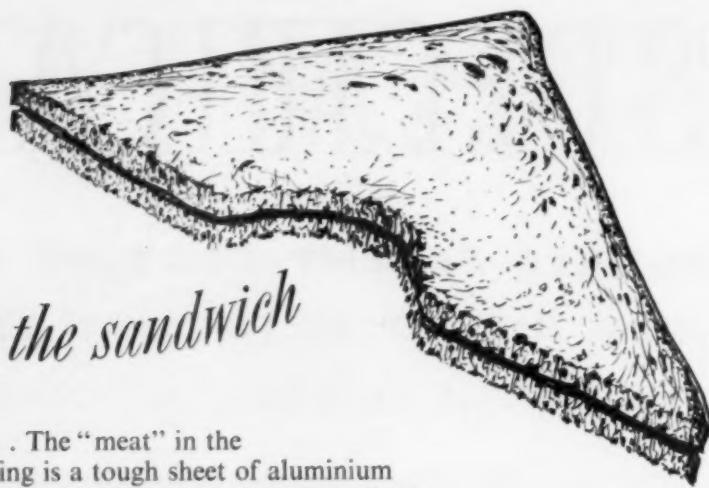
*External View of the Factory*

ISSUED BY  
THE PATENT GLAZING CONFERENCE  
BURWOOD HOUSE  
CAXTON STREET  
LONDON, S.W.1



*Contractor: Bovis Limited, London, W.I*

*The meat in the sandwich*



is the best part of it . . . The "meat" in the Finlock metal gutter lining is a tough sheet of aluminium sandwiched between two layers of bitumen . . . Once fixed the lining is weathertight and trouble-free, thus Eaves fitted with Finlock will have virtually no maintenance and will last as long as the walls . . .

FIN-AL metal linings are Guaranteed for 20 years, and installed promptly on site. Finlock Service Department take over all responsibility for this work at no extra cost to the Contractor.

Please ask for details.



The original Finlock bitumen and felt lining system is still satisfactory when laid to our directions, yet FIN-AL linings are the Final Word.

**FINLOCK**  **GUTTERS LTD.**

Head Office: FINLOCK HOUSE, 25 FRANT ROAD, TUNBRIDGE WELLS, KENT

Telephone: Tunbridge Wells 3396/9

*We deliver to all parts of England, Scotland, Wales and N. Ireland.*

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. Od. post paid. U.S.A. and Canada \$9.00

Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1  
Telephone: WATERLOO 3333 (60 lines). Telegrams: "ARCHITONIA, SEDIST, LONDON."

Branch Offices: Coventry: 8-10 Corporation Street; Birmingham: King Edward House, New Street; Manchester: 260 Deansgate. Tel.: Blackfriars 4412 (3 lines), Deansgate 3595 (2 lines); Glasgow: 268 Renfield Street.

## SMALL HOUSES

**T**HREE is evidence, somewhat disconcerting, that the switch of emphasis from state-aided to private enterprise housing has acted to the detriment of the profession, in that there is now less housing work for architects. This may be seen by some as a paradox: that the standard of appreciation of design and aesthetics is set more highly by the people acting corporately through local authorities' housing committees than when acting individually in their own interests. However, there are other causes operating. If these causes can be recognised with any certainty, it should be possible to find remedies.

Between the wars, private enterprise housing for the bulk of the people was in the hands of the speculative builder, and the architectural profession was not used very extensively in housing, apart from individual private houses for the well-to-do client. Turning to the present time, there may be said to be three main classes of "consumer". There is the individual who wants a house "off the peg", and this class comprises the great majority. There is a second smaller class, though still numerous, who want a standard house built to order, and there is a third class, small in numbers, who are still well-to-do and want their house "tailor-made" on Savile Row lines.

To continue the analogy of tailoring, the first class are equally ready either to buy a second hand house or to buy a new one recently completed by a spec. builder. What they want is to see the finished article before buying it and to have the article they have seen, just on the same lines as they would buy a suit ready made. Clearly, there is little opening for the architect here except through the speculative builder.

The second class will go to the architect with the demand to "make me one like that", just as they would go to one of the big multiple tailors and have the model suit in the shop window copied to their own measurements. Such a suit, in fact, costs a good deal less than one specially tailored to order, but the architect's fee to design a house, in proportion to the cost, will be the same whether it is to be "one like that" or one

specially designed and detailed for the third class of client, the well-off person who wants a quality job.

It has been said by one familiar with the organisation and methods of speculative builders that they are successful chiefly for two reasons: they give the client what he wants; whatever the profession may think of it, it is a fact that in commerce one fails pretty quickly unless one gives the public what they want, and this unfortunately seems to involve pretty low aesthetic standards where the individual consumer is concerned, whether it be a wireless set, a coffee pot or a house. This is not to condone such standards, but it does mean that the move to improve them must be made tactfully and slowly. The "off the peg" public must be led gently, not driven, and it only does harm when one of these clients approaches an architect for a small house, and is met with a complete refusal to produce anything but a design in an ultra-modern idiom.

The other chief reason for the success of the speculative builder is his expert knowledge and experience of design and detailing in relation to the quantities of materials; in a scheme for 400 houses, one extra stair or two feet of additional party wall makes an appreciable difference in the cost. It has been said by an organisation of house-builders that there are few architects with this expert knowledge of economics. This statement needs challenging, and it can well be pointed out that there are many architects who previously specialised in state-aided housing and must have this knowledge.

A more real difficulty is that the scale of fees for state-aided housing is not applicable to repetitive design for spec.-building projects. Fees for such work must be based on the full R.I.B.A. scale for the design element, with a mutually agreed component for repetition. There is a case for examination as to whether it would not pay the profession to offer services for spec. building schemes at some scale nearer to that for state-aided housing.

The second class of client who wants a standard pattern house is prepared to pay somewhat more than

the "off the peg" client, but is inclined to be deterred by the "Savile Row" price, or full R.I.B.A. scale fee. This client does not, in fact, usually want the full services which an architect gives. He will very often not require supervision and he will certainly not require any design or detailing of finishes, interior fittings, etc. In fact, what he really wants is the plan of a house made of standard components prepared and put out to contract to a builder who is reasonably trustworthy, after which, in his view, the architect's responsibility finishes. The fees for full services under the existing scale are revealing. For a £1,500 house of the standard pattern the scale fee is £210 (8.6 per cent), or two-thirds of this if the architect's responsibility terminates when the contract is let. For a quality house costing £5,000, the fee is £300 (6 per cent). Surely the difference of £90 is not proportional to the difference in the amount of detailed work required of the architect. Is there therefore a case for some modified scale of fees for small domestic work? The general impression is that the urban architect with heavy overheads considers the existing scale too low anyway, while the architect outside the big towns, with small overheads, would be prepared to accept a somewhat reduced scale rather than not get the work.

There are probably other causes for architects failing to obtain a really substantial proportion of private housing work. While it is not difficult to speculate on these causes, it is much more difficult to get any reliable information in the way of statistics which would throw light on the problem. Prospective clients who do not know of an architect in their locality, often write to the R.I.B.A. for advice and are then referred to the Allied Society in their area who put them in touch with an architect. It may be safely assumed that the number of such requests is comparatively small in proportion to the total number of people contemplating building a house, and, at a guess, would not run to more than a couple of hundred a year.

It is understood that the R.I.B.A. have made an attempt to find out to what extent these enquiries resulted in the appointment of architects and, where they did not, to elucidate the reason for failure. The enquiry is said to have extended over some two and a half years, a record of the names of those enquiring having been kept and "follow-up" letters sent to each. It was said that the enquiry had not extended over a sufficient number of clients to make it a very accurate sample of the country as a whole and that any conclusions should therefore be drawn with considerable reserve. However, in the first half of the period something like 33 per cent did appoint architects, while about the same proportion gave up the idea of building. In the second half, rather fewer architects seem to have been appointed, perhaps 25 per cent, and rather more clients seem to have given up their idea of building. Many of those replying to the enquiry gave their reasons for abandoning their project and these seem to have been particularly the difficulty of finding a building

plot or that the expense was much greater than they had expected. No information seems to be available as to what the clients who abandoned their building projects did subsequently but it would hardly be unreasonable to assume that many of them bought a "spec. built" or "second-hand" house.

The recent decision of the R.I.B.A. Council to sponsor a series of standard R.I.B.A. small house designs may go a long way towards securing the greater use of the profession for private domestic work. At first glance it may seem that the availability of standard designs for a small fee would act to the detriment of the architect. The scheme was tried out recently with success in Australia, and it soon became evident that it did, in fact, act to the benefit of the profession. Not only was the general standard of design much improved, but architects became increasingly employed in the work of adapting the standard design to the site and in supervising the building, and there was soon evidence that clients began to see the value of having the full services of an architect for an individually designed house. It is understood that the problems at present being faced by the R.I.B.A. are those of finance. It will cost a good deal to float the scheme. There is also a word of warning, which is no doubt already in the ears of the R.I.B.A. Council: care must be taken to ensure that the standard designs are not so far in advance of public taste as to be unacceptable. It would be wiser to gain public confidence first and subsequently to educate the public by a gradual advance in the general standard of design.



Mr. Gontran Goulen, Deputy Director of the Building Centre (back to camera) demonstrates a sliding window to M. Vladimir Kucherenko, Deputy Chairman of the Council of the U.S.S.R. during the visit described by Abner in last week's issue.

## E V E N T S A N D C O M M E N T S

### AN ARCHITECTURAL COFFEE BAR...

Reflecting that if I had been invited to the opening of each new Espresso bar during the last year or so I would have had a lot of free lunches I went to the Piazza in Marylebone High Street where the owners, Fitzroy Caterers (a subsidiary of Levy and Franks), gave an opening party last week. Designed by John and Sylvia Reid, who did the "Champion" pub, the café is completely devoid of whimsy and the influence of Jean Cocteau. The interior is mainly black and white and is decorated with very large photographs which cover whole walls. The back of the café which is top lit has plain whitewashed brick walls. Chairs by Anne Jacobean, tables with that terrazzo plastics sheeting I mentioned last week. The architects chose everything right down to the Swedish stainless steel cutlery and they get full marks for the way they have done it. The ceiling of the front of the shop has a series of arches running across the shop and the tubular lights are housed in black troughs suspended beneath the meeting edges of the vaults. All very neat and pretty. The menu is as imaginative as the décor and includes some exotic sounding fruit drinks and the best imitations of Danish open sandwiches I have seen—or tasted—in this country.

Messrs. Levy and Franks are the managers of the Barclay Perkins owned "Champion", so that this is in a way a satisfied client story.

### ... AND OTHER EATING CHANGES

The sharp reaction of some of the larger caterers to the competition of the espresso bar can be seen best round about Piccadilly Circus. On one corner Fortes some time ago installed the largest espresso machine in the largest bar. More recently a corner of the Coventry Corner House has been radically altered to accommodate a very clean, attractive ingenious and acoustically treated hamburger café, where a dozen chefs under stage-lighting conditions are kept hard at work producing this American speciality served in a soft bun with coffee or alternatively some thick, milk drink, called a "Whippey". Messrs. Lyons, however, are not so particular as the owners of the Piazza about their tableware, which is strong, serviceable, and ugly in shape and colour. Upstairs is a curiously ornate eating place called the Egg and Bacon. Before you enter you may watch through a plate glass window, more chefs cooking bacon, eggs, tomatoes and sausages on the latest equipment. The food is served on the metal dishes on which it is cooked and looked most inviting—even after a hamburger and coffee. They certainly have the method worked out and this is as near mass production for the individual—if you understand me—as cooking well could be. I have only

seen it bettered once, by Charlie Chaplin who actually persuaded the hen to lay the egg direct in the frying pan.

### SOLID FUEL APPLIANCES

The Coal Utilisation Councils list of Recommended Domestic Solid Fuel Appliances is well known, or should be, to architects. The latest edition presented to the Press at the Building Centre last week is the eleventh. It is bigger and better than its predecessors and is issued jointly with the Solid Smokeless Fuels Federation. Previously both organisations had their own lists. In the future there will be but one.

The first U.C. list published in 1949 contained 151 appliances, the present list has nearly 600. If it becomes much larger architects will be asking for a selected list of recommended appliances.

### C A R L M I L L E S

Carl Milles, who died last week in Stockholm at the age of 80, was a sculptor whose work was not only considered great by critics all over the world but was very much admired by the public wherever it was known, and particularly in Sweden and America, where he spent much of his working life.

Milles was the son of a Swedish army officer named Andersson, who, fighting for the French, was captured at Sedan and afterwards changed his name to Milles. Starting life as a carpenter's apprentice Carl Milles turned to wood carving and he won a small bursary. With this he set off for Chile to join a family friend who had a school of Swedish gymnastics there. He travelled no further than Paris on his way and stayed there eight years. He studied under Rodin and first exhibited in the salon in 1899. He became a professor at the Royal Academy of Stockholm and in 1940 was elected an honorary R.A.

Milles output was tremendous, not only in the number of commissions which he executed, but also in their size and complexity. He quite early on became an "architects' sculptor" and many of his largest works were designed as embellishments to buildings or in architectural settings. His great fountains outside the Stockholm Concert Hall and between the theatre and concert hall in Gothenburg are typical examples.

The range of Milles' style was remarkable. Much of his work had a fairy-like quality. His human figures and animals are all very much alive but have a touch of fantasy which makes them strangely unreal. On the other hand some of his memorial sculpture was very real indeed.

So great was his output that there is hardly a large town in Sweden without an example of his work. The biggest collection is, however, in the wonderful garden in Lidingö overlooking Stockholm, which he gave to the nation some years ago. This is a magnificent open

air sculpture exhibition showing the great man in all his moods. Furthermore the house and studio contains some excellent classical and mediaeval sculpture collected by Milles.

On my visit to the Milles' garden in 1951 I had the good fortune to see Milles and to be taken round the exhibition by one of his close personal friends. I do not know whether there is an example of Carl Milles' work in the open air in this country. The Tate has several pieces by him.

#### E.L.M.A. CONFERENCES

The Lighting Service Bureau are to revive their pre-war practice of holding annual conferences on lighting matters of particular interest to architects. The first conference of the new series will be held in the Lecture Theatre at 2 Savoy Hill, Strand, W.C.2, on three consecutive Thursday evenings, 20th, 27th October and 3rd November. The meetings will begin at 6 p.m. and last until 7.30.

The conferences which were first started in 1933 used to be looked upon as post-graduate sessions to continue what the architect learnt at his architectural school. The first conference will deal with the use and abuse of modern electric lamps. The Chairman will be V. C. H. Crear, M.A., Chairman of the E.L.M.A. Council, and the lecturer will be A. D. S. Atkinson. Michael Patrick, the Principal of the Architectural Association School of Architecture will open the discussion. He was chosen because it is thought that this particular discussion will be of interest to students. The second conference will deal with the planning to achieve a desired lighting effect. The Chairman will be C. J. W. Scott, a member of the E.L.M.A. Council and General Sales Manager, Supply Division of Crompton Parkinson Ltd. The lecturer will be J. M. Waldram. The discussion on this occasion will be opened by Sir Howard Robertson who was associated with the conferences from their commencement. The last conference will deal with the appearance of lighted objects and surfaces: the Chairman will be A. E. Page, a member of the E.L.M.A. Council; and the lecturer E. B. Sawyer; the discussion will be opened by Maxwell Fry.

Each session will be illustrated with demonstrations and lantern slides and it is intended that they shall cover three principal headings:—(a) new developments in lamps and their application, (b) levels of light and (c) brightness and contrasts in lighting demonstrated by examples and experiments.

Subjects for follow-up courses will include industrial and commercial lighting and lighting equipment.

#### THE BUILDERS' REPLY

The President of the London Master Builders' Association, Mr. L. J. Holloway, replied to critics of the Building Industry in a speech at Mitcham recently. He described criticism as ridiculous and unfair. I imagine that he was referring to the goings on in the *Manchester Guardian*. Mr. Holloway pointed out that

the building industry works in the open where everyone can see it drinking its cup of tea. This cup of tea caused the whole industry to be damned for incompetence. It had its incompetents of course. It would be strange if it had not in an industry which employed a million men. But it also had its competents. Mr. Holloway went on to claim that the building industry was on average as efficient as any other industry.

A recent episode in "The Archers" brought the B.B.C. a sharp rebuke from Mr. Holloway. An apprentice of 16 was said to have thrown some empty paint tins into a stream where they contaminated the water and caused the death of two heifers. The apprentice was described as irresponsible and waiting for his call-up. I do not often hear "The Archers" but I did hear this episode and I wondered whether it would be allowed to pass unremarked upon. Mr. Holloway objected to the building industry being picked on in the first place and then pointed out the real flaw which is that apprentices are free from call-up worries and are usually pretty serious young men or they do not remain apprentices for long. Mr. Holloway also complains that the music hall jokes about the building industry, but he can claim no monopoly there for it also jokes about the B.B.C., the Foreign Office, the R.A.F., the Government, mothers-in-law, red noses and other serious institutions.

The fact remains that petty, ignorant criticisms of the building industry do a great deal of harm. In an "open-air" industry they are bound to occur. Many of the criticisms may be justified but seen against the whole background unimportant.

#### A B N E R

#### Correspondence

Sir.—I would like to commend the Society of British Aircraft Constructors' annual exhibition at Farnborough to all those concerned with building, and at the same time enquire whether the exhibitors can be persuaded to extend the period by another week?

Farnborough is open for seven days only; one day is reserved for Technicians, three days for guests, and the public are admitted on Friday, Saturday and Sunday. This is, of course, appropriate, but the crowds are so great and the peerless flying display so uplifting that one is in no mood to consider the many lessons which the Aircraft Constructors can offer.

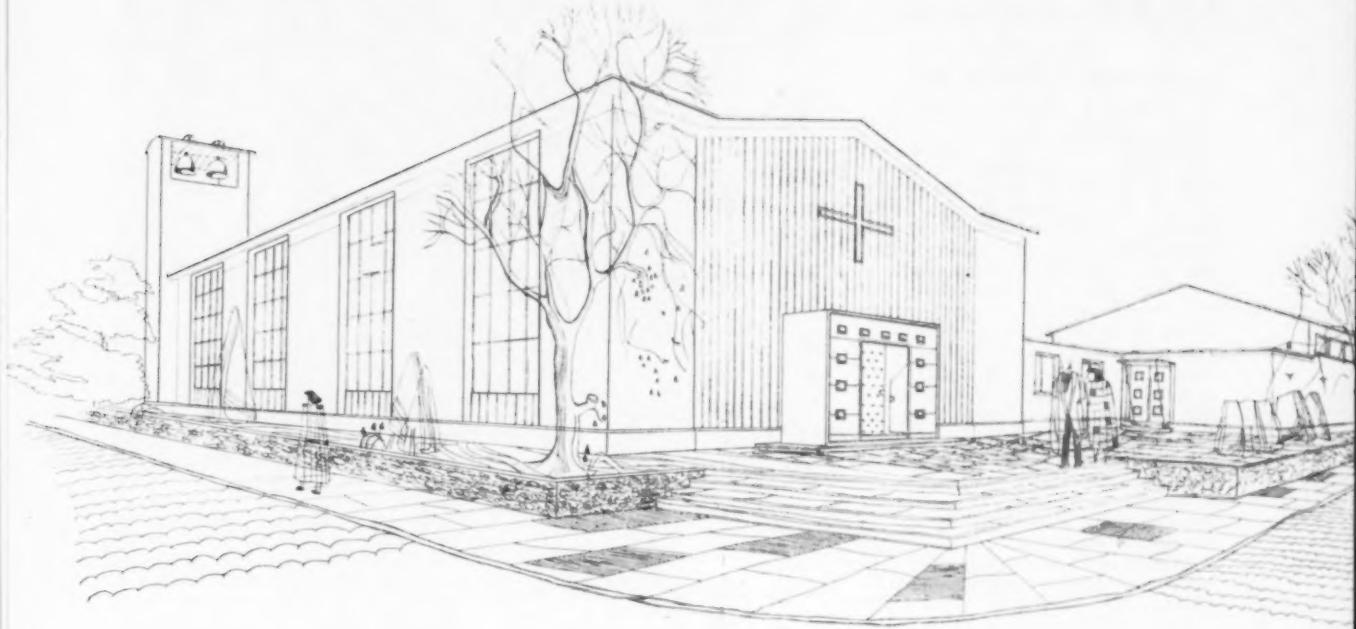
If, however, it were possible to examine the great in-door exhibition (so well arranged this year) in more leisurely circumstances, the architect would find it just as interesting as a bi-annual Building Exhibition, and probably a great deal more stimulating.

Since many of the exhibitors are already connected with the building trade, and so much that is relevant in the way of new materials and processes is on view, the time available to the enquiring public seems insufficient.

Perhaps the Society would care to consider keeping the covered exhibition open in the afternoons for another week, with a regular bus service to and from some central point in London. I suppose it is too much to ask for a many-seater helicopter service as well.

Yours faithfully,

PATRICK HORSBURGH.



The new Church and Hall of St. Ninian, Musselburgh, the foundation stone of which was laid by the Duke of Hamilton on 16th September. The church is the first of the Low Cost Design type evolved by Messrs. Cruden Limited for the Church of Scotland. The architects are Messrs. P. Whiston and McRobbie, A.R.I.B.A. Estimated cost, £21,000. Seating capacity: Church, 500. Hall, 350. Construction: Walls of local brick roughcast externally, plastered internally. Roof: sheet copper on boarding, supported by six steel portal frames. Gable: Western Red Cedar. Floor: Hardwood.

## NEWS

### Housing Subsidies and Council House Rents

Speaking to the Conference of the Association of Municipal Corporations at Harrogate on September 22, the Rt. Hon. Duncan Sandys, M.P., Minister of Housing and Local Government, said "It would not be appropriate for me to announce here the Government's future policy on housing subsidies. Parliament is the proper place for that.

"On the other hand, I think it is right, at a conference of this importance, that I should give you some indication of our general attitude towards this problem.

"The suggestion has been made in some quarters, that there should be an all round increase in housing subsidies, to take account of the rise in the rates of interest on loans. I think most of you would agree that that would be wholly unsound and unrealistic.

"The Government are certainly not thinking of increasing the burden of subsidies. The problem which is engaging our attention is how to reduce it.

"Before doing a lot of arithmetic about increased costs of building and borrowing, it is just as well to remind ourselves what the housing subsidy is for.

"The purpose of the subsidy is to help those with insufficient income to bridge the gap between the full economic rent and the amount they can reasonably afford to pay; so that no one shall, by reason of poverty, be prevented from having a decent, healthy home.

"The justification for subsidies is need. The further we drift away from the basis of need, the more unsound, unjust and anomalous our housing finance will become.

"As everyone knows, large numbers of council house tenants are having their rents subsidised to a greater extent than their financial circumstances require. The subsidy on their rent is paid by the general body of ratepayers and taxpayers, many of whom are less well-off and may not enjoy the benefits of subsidised council houses. That naturally causes resentment.

"The remedy rests largely in the hands of the Local Authorities. They can do much to restore equity in housing finance by making up their minds to charge rents more in line with the current level of wages and the present-day value of money. Hardship can be avoided by the adoption of differential rent schemes, which ensure that the subsidy, instead of being handed out indiscriminately, is fairly allocated to each according to his need. Quite a number of Local Authorities of different political parties have successfully introduced

such schemes. I hope others will follow their lead.

"The Government recognises that they also have some share of responsibility for the existing position. There is no doubt that the present unreal basis of housing finance has, over the years, been sustained and encouraged by the high level of the subsidy. This nettle has got to be grasped. The Government do not intend to shirk the issue.

"While we are convinced that the housing subsidy as a whole must be reduced, we are determined to do nothing which might impair the impetus of the all-important drive on slum clearance and on housing the overspill population from the congested cities. I have invited representatives of the local authority associations to discuss this problem with me on October 3. Meanwhile I feel sure I can rely on the local authorities to approach this delicate question with their usual sense of responsibility."

### British House-builders Study Tour in U.S.A.

A group of leading British house-builders—members of the Federation of Registered House-Builders (which is affiliated to the National Federation of Building Trades Employers)—left Southampton by the Queen Elizabeth on 22 September for a study tour of the United States.

The objects of the tour will be:—

(i) To study at first hand the organisation and construction techniques of private house-builder firms in the United States. In this connection special attention will be paid to:—(a) productivity and means of reducing costs; and (b) standards of design and performance and the layout of estates.

(Some account of these matters was contained in the Report of the Productivity Team which visited the United States in the summer of 1949 and it is felt that an up-to-date review will be of value to the private house-building industry in this country.)

(ii) To examine the organisation and methods adopted by the private house-builders (the National Association of Home Builders) in the United States in regard to the promotion of the ideal of home-ownership. With the greater freedom now available, this aspect is thought to be of some significance in the furtherance of the general policy to encourage home-ownership in this country.

(iii) To foster and maintain good relations between organised house-builders and estate developers and the appropriate body in the United States. (The opening of the new National Housing Centre in Washington on 3 October will, it is understood, be attended by representatives from several countries.)

A report of the tour will be made in due course to the Council of the

Federation of Registered House-Builders.

The House-Builders' Study Group includes:—

Mr. George W. Reed (President of the Federation of Registered House-Builders), Mr. C. R. Setter, J.P., Mr. C. Douglas Calverley, Mr. Robert O. Lloyd, O.B.E., Mr. J. B. Ratcliffe, D.S.O., and Mr. F. Stimpson.

### N.F.B.T.E. Research Committee

A meeting is being held in London today of the N.F.B.T.E.'s Building Research and Technical Information Committee at which Mr. K. Alsop of the B.R.S. is giving a summary of the progress made to date in connection with the series of full scale trials by builders of selected results of research. Later in the day there are visits to Messrs. Haymill's site on Western Avenue to see some recent developments in pre-stressed concrete building frames and floor planks; to the B.R.S., Garston, to hear from Dr. Nurse an account of work on use of p.f. ash in the making of light weight aggregates and finally to the new research centre of Messrs. John Laing & Son at Boreham Wood.

### M.O.W. Display at Building Exhibition

The Ministry of Works exhibit at the Building Exhibition, to be held at Olympia, London, from 16 to 30 November, is entitled "How to Build".

This illustrates various methods of design and construction available to architect and builder and, in the interest of better building, worth their serious consideration before they start any new project.

A series of separate panels covers particular aspects of building construction or the installation of services, examples being taken from completed structures or work on actual sites.

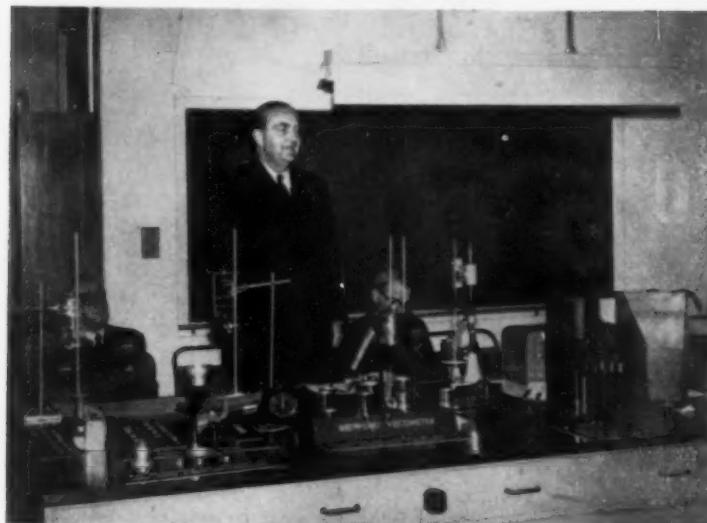
Another feature with photographs, drawings, and models of completed work proves that imagination applied to technical problems of space and shape can produce buildings attractive as well as durable.

Six new films to be shown on the stand, each running about ten minutes, depict up-to-date methods of preparing and applying cement and concrete, prefabrication, and delivery and storage of materials.

### L.M.B.A. at Building Exhibition

The L.M.B.A. is again to be represented at the Building Exhibition. As on previous occasions it is organising a clubroom as a meeting-place for members of the National Federation from the Regions and their friends visiting the Exhibition.

The Clubroom is in the Grand Hall, on the right of the Addison Road



Lord McCorquodale opening the new Paint Technology Section of the Borough Polytechnic, South London, where all the equipment has been contributed by the British Paint Industry.

entrance coming in, and drinks and light refreshments will be available.

An interesting exhibit in the club-room this year will be the 1472 contract for the building of a house in Bristol, which recently came to light.

### Forthcoming Exhibitions at the R.I.B.A.

#### *Exhibition illustrating the use of Pulverised Fuel Ash*

Some time ago the Central Electricity Authority put on show an exhibition to illustrate the uses of pulverised fuel ash. This exhibition was, however, intended in the main for the general public and the Authority have now agreed to prepare a fresh exhibition on the same subject but designed specifically to interest architects. The new exhibition will provide more detailed technical information and will illustrate the potentialities of this material which, up to now, has been a waste product.

It will be on view at the Royal Institute of British Architects, 66, Portland Place, London, W.I., from October 14-21 (Mondays-Fridays 10-7; Saturdays 10-5).

#### *Exhibition by the Ministry of Works*

The Royal Institute is to stage, in association with the Ministry of Works, an exhibition to show the architectural methods applied to the preservation of Ancient Monuments and Historic Buildings. To deal with the special problems which arise, the Ministry architects have evolved a number of techniques which the Ministry feel will be of considerable interest both to the profession and the general public. A Joint Com-

mittee is at present working out details of presentation for the exhibition, which will be shown at the Royal Institute in December next.

#### *Exhibition of Australian Architecture*

The spring exhibition at the Royal Institute will be provided by the Royal Australian Institute of Architects. This is the first exhibition of Australian Architecture to be shown in this country and it is expected that it will take the form of a survey of work from all parts of the country.

The Royal Institute hopes from time to time to show work from other Commonwealth countries.

#### *Appointments to National Parks Commission*

Mr. Duncan Sandys, Minister of Housing and Local Government, has appointed Mr. H. J. G. Griffin, C.B.E., and Mr. Gervas Huxley, C.M.G., M.C., members of the National Parks Commission.

#### *CHANGE OF ADDRESS*

The Association of Building Technicians has moved from 5 Ashley Place to 1, Ashley Place, London, S.W.1. Tel.: Victoria 0447/8.

From September 29, 1955, the address of the Royal Fine Art Commission will be: 5 Old Palace Yard, London, S.W.1. The telephone number will remain WHitehall 3935.

#### *COMING EVENT*

*The Institution of Structural Engineers*  
October 6 at 6 p.m. Presidential Address by Stanley Vaughan, at 11 Upper Belgrave Street, S.W.1.

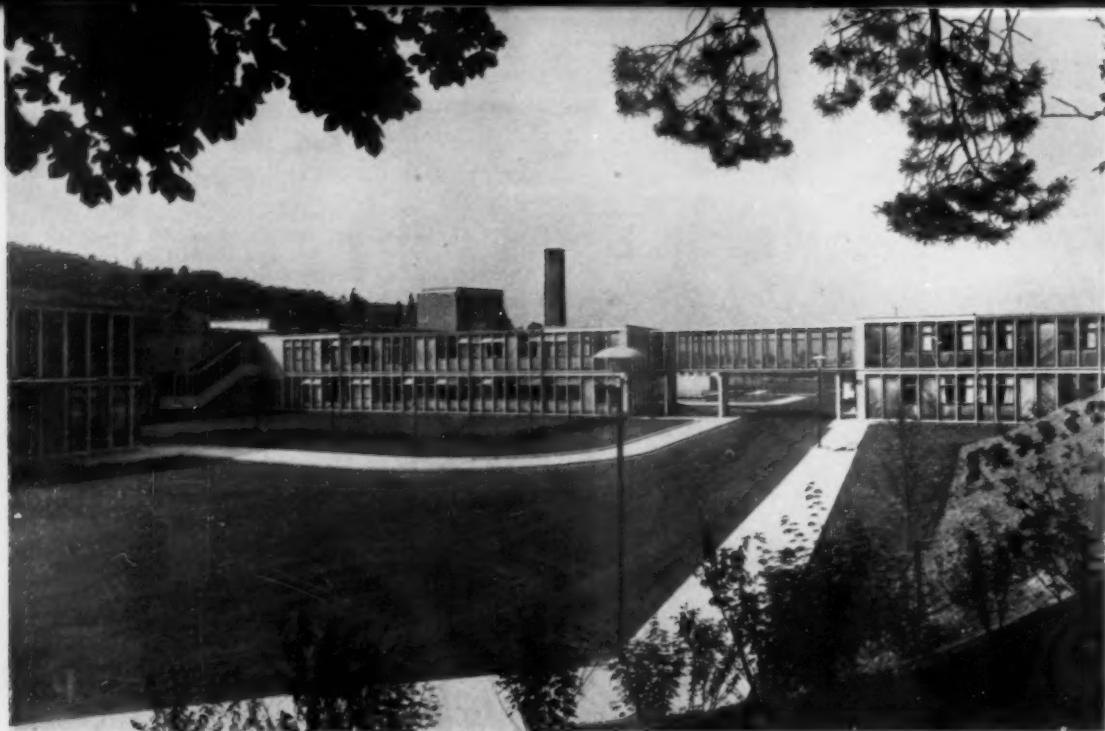
### Northumberland National Park and Border National Forest Park

The Northumberland National Park was designated on 20 September by the National Parks Commission. The Designation Order is subject to confirmation by the Minister of Housing and Local Government. In the Northumberland National Park, as in other National Parks, the Park Planning Authority will have special duties and powers for preserving and enhancing the beauty of the area and for promoting its enjoyment by the public. It will be the ninth National Park, the Park Planning Authority will most of the upland country of Northumberland, from the Cheviots in the north to the Roman Wall in the south: part of its western boundary marches with the Forestry Commission's Kielder Forest.

At the same time the Forestry Commissioners have declared an area under their management adjoining the National Park to the westward—including Kielder Forest in Northumberland and the adjoining forests of Kershope in Cumberland and Newcastle-on-Tyne and Waughope in Roxburghshire—as a National Forest Park to be known as the Border Forest Park. In acquiring land for afforestation, the Forestry Commissioners often have to take over areas which are too high lying or rocky or otherwise unsuitable for planting; much of this land is beautiful in itself and is good walking country. The Commissioners feel that it should be made accessible to the public and they have done this by declaring National Forest Parks, of which the Border Forest Park will be the eighth. It is also the Commissioners' policy to throw open their plantations to the public as soon as it is practicable to do so, and although it will be many years before some of the plantations in the new forests of the Border Forest Park reach this stage, many of the older plantations have already reached it.

In the Northumberland National Park, the Park Planning Authority will have powers under the National Parks Act to arrange among other things for the provision of accommodation, camping and caravan sites, and parking places. The Forestry Commission, in developing the Border Forest Park, will do all they can to improve access and to provide suitable camping sites, and will co-operate with the National Parks Commission, the Northumberland and other County Councils and such bodies as the Youth Hostels Association.

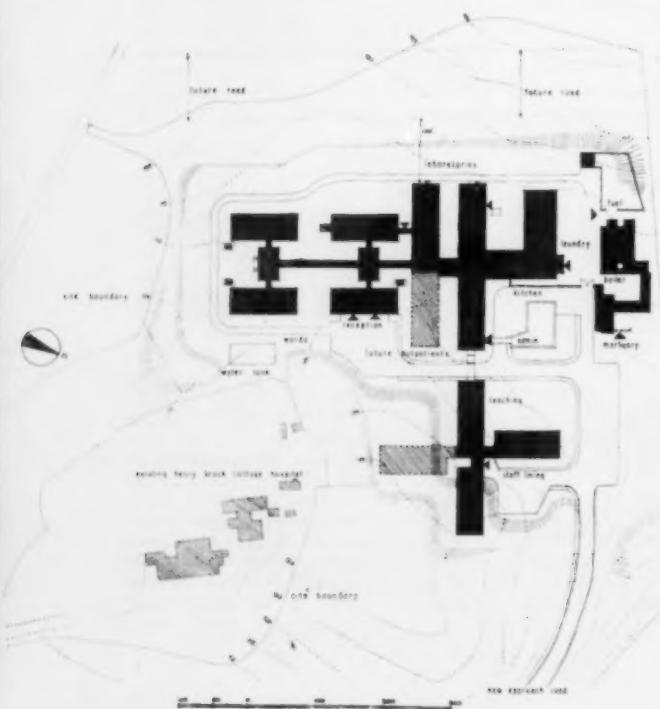
The establishment of a National Park and the declaration of a National Forest Park in the area will ensure that practically the whole of this splendid hill country will be administered with special regard for open air recreational facilities for the public.



## ***Vale of Leven Hospital, Alexandria, Dunbartonshire***

**Architect:** J. L. GLEAVE (John Keppie & Henderson & J. L. Gleave) in consultation with FORBES MURISON & R. T. CUNNINGHAM Chief & Deputy Chief Architects to the Western Regional Hospital Board and J. H. DAVIDSON of the Department of Health for Scotland

**Chief Assistant:** T. R. SCOTT (now Partner)



**T**HE new hospital at Alexandria, Dunbartonshire, Scotland, is an emergency project that will serve as a general hospital for an area covering approximately Dunbartonshire and Argyllshire. The programme required accommodation for 150 beds, but at emergency spacing the wards will take up to 280. The ancillary accommodation is larger than usual for this size of hospital as there are two operating theatres, each of which can take two tables in emergency; the kitchen is equipped to provide meals for 600; the laboratory and laundry are for Area use and administration accommodates the local board of management offices.

The site of the hospital is a small sheltered valley at the south of Loch Lomond. There are fairly high hills to the west and south of the site, the direction of the Clyde and industrial areas. There are low hills to the east, but it is fairly open to the north, giving a view of Loch Lomond and Ben Lomond from the approach road and forecourt of the hospital.

The line of the natural valley runs approximately north and south, so that the main spine of the scheme placed itself along this valley. Road access, sewer outfall, and gas, water and electricity services connect

Looking from East of Outpatients reception towards Admin. wing and Nurses' living quarters and teaching School linked by bridge.

The Bridge with entrance to Admin. on extreme right.



### Vale of Leven Hospital, Alexandria

to the site at the north-east corner, so that the north end of the services spine is the receiving end for all goods and services. The prevailing wind is from the south-west which also placed the boiler house chimney at the north end of the spine.

Two major decisions regarding the general policy of the hospital design were accepted. The first decision was that it was decided to build a low rather than multi-storey hospital to ensure that the buildings are sheltered by the surrounding hills from winds and rainstorms. While it was always the aim to reduce internal distances to a minimum, the low buildings give

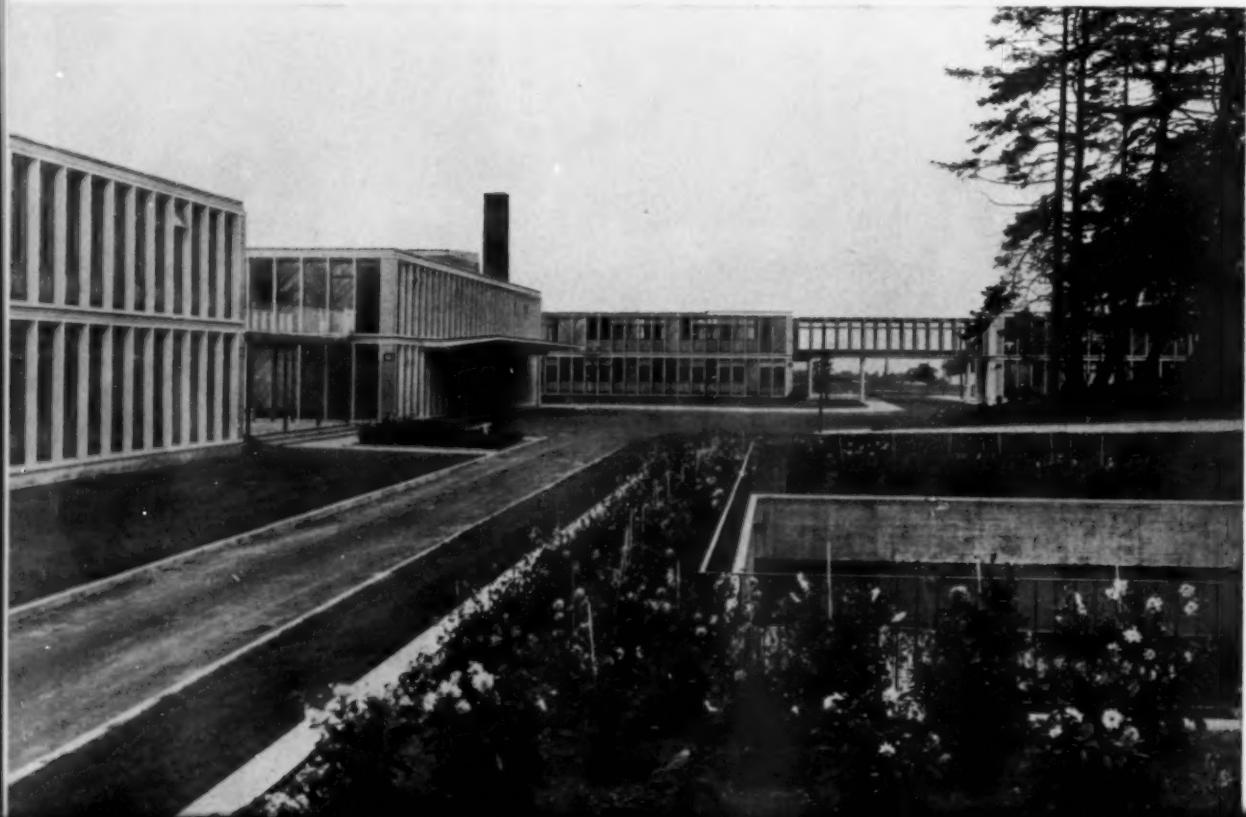
dispersal and allow that adequate light, air and shelter are available to the different blocks if they are raised to their maximum three storeys in height. The second decision was, that although the north-south axis of the hospital gives east and west orientation to the long sides of the wards, it was decided that where opposition of requirements arose, aspect and orientation of wards should be sacrificed to obtain compactness in planning.

The theory behind the design of the hospital depends on a clear definition between the two plan elements: (a) The Communication Links (human and mechanical) which can be considered reasonably permanent and



*The main spine; Admin. and Bridge on left*

*Outpatients Entrance and Wards on left*



their structure finalized (even though pipe sizing may be changed from time to time). (b) The Accommodation Groups which must be in a perpetual state of change, and structurally capable of growth or retraction as medical desirability dictates.

The Alexandria design obtains a certain architectural unity because of the extreme contrast between the heaviness of the finalized structure of the main service spine and the apparently light, flexible birdcage structure of the standard units containing the hospital accommodation. The most important design element in the scheme, however, is that although it is to be expected that the standard units will change in number and disposition, all changes will take place on a definite architectural scale, the standard unit of form and the modular unit of surface pattern, thus giving a measure of architectural cohesion to the growth.

#### The Main Spine

The backbone of the hospital is the services spine, running north to south, three storeys in height:

(a) The basement corridor is a walking duct containing all main pipe runs exposed for easy inspection and considered as a "soiled duct" as it is used for movement of incinerator rubbish, ward kitchen refuse, soiled linen, mortuary access, etc., so that there is no

horizontal movement of soiled trolleys at ground floor level.

(b) The ground floor corridor is the "main street" of the hospital for general communication between all departments and central supply.

(c) The first floor corridor is for food service only. The basement and first floor corridors are restricted to staff use only, which means that visitors and patients only use the ground floor corridor for horizontal circulation, which makes their supervision more simple.

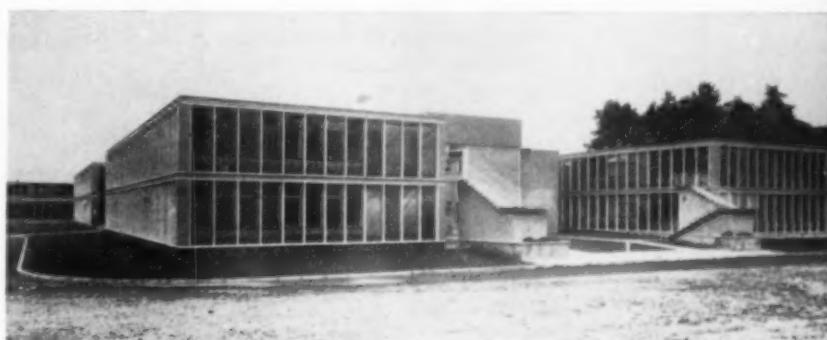
#### The Standard Unit

All parts of the scheme that can be considered as hospital accommodation groups are planned on the basis of one or more standard units to each department. The 100-feet by 40-feet floor area of the standard unit is clear space except for four internal six-inch square stanchions. The external curtain walls are divided by concrete mullions at a 3 foot 4 inch modular spacing, and the back of the mullions can take the width of a partition wall. This means that during planning the elevation can virtually be ignored, the rooms being placed in their proper functional sequence in their minimum length to the nearest eighteen inches. Any one of five standard types of assembly panel used for each modular space is then chosen to suit the use of

**Civil and Structural Engineer:**  
Geo. Davie, Crawford & Partners  
**Heating and Electrical Engineer:**  
I. Hunter & Partners  
**Quantity Surveyor:**  
A. L. Currie & Brown  
**General Contractors:**  
Angus M. MacDougall & Co., Ltd.

#### Subcontractors:

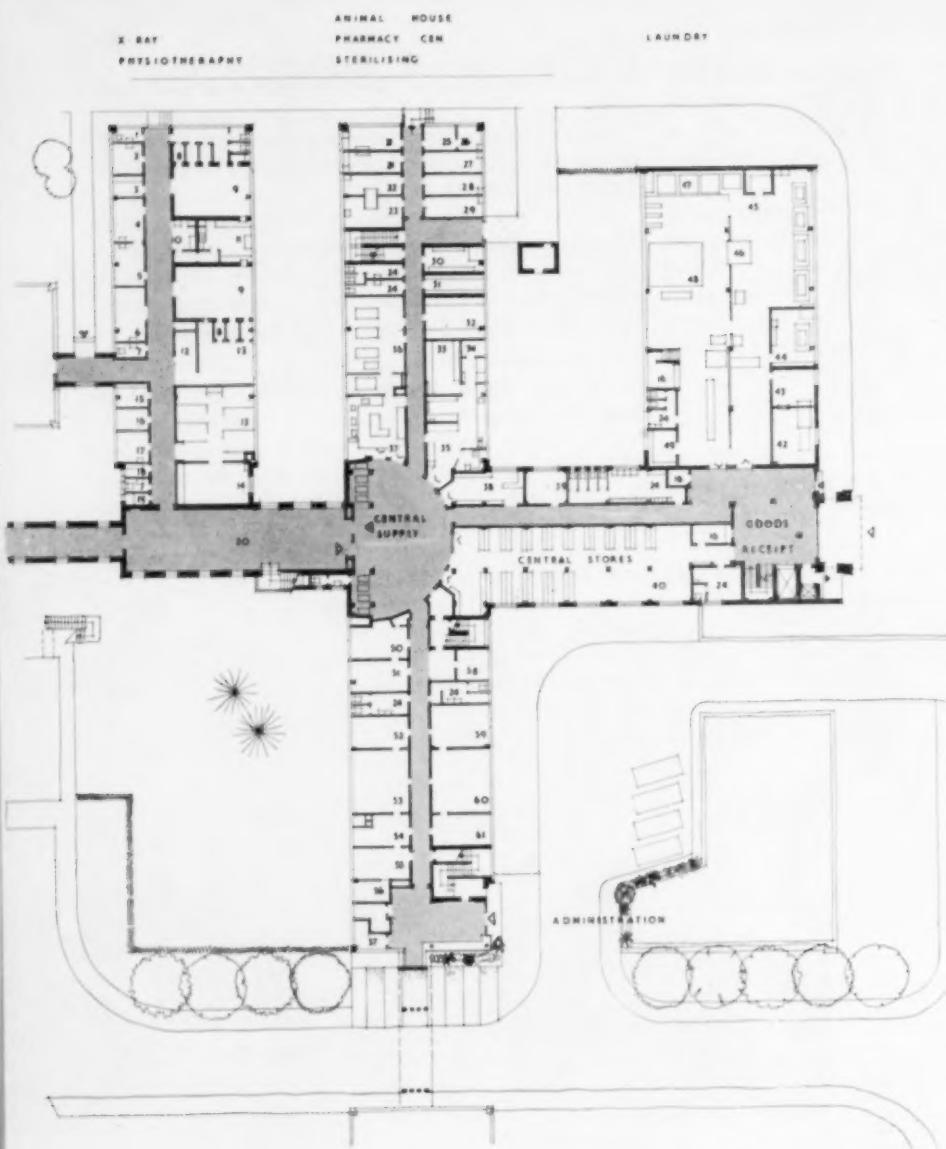
Assembly Panels: James Y. Keanie Ltd. Bed Screens: John Weston. Concrete Reinforcement: The Expanded Metal Co. Ltd. Electrical Installation: Claude Hamilton, James Kilpatrick & Son, Ltd. Flooring: Semtex Ltd., Korkoid Decorative Floors, George Stephenson & Co. Ltd. Furniture: David Elder, Findlater Smith Ltd., Macdonald Brothers, Watson & Co., Wylie & Lochhead Ltd. Heating: G. N. Haden & Sons Ltd., James Combe & Son Ltd. Hose Reels and Fire Appliances: Pyrene Co. Ltd. Ironmongery: Parker Winder & Achurch Ltd. Joinery: John Cochran & Company. Kitchen Equipment: James Stott & Co. Ltd. Laundry: Thomas Bradford & Co. Ltd., D. & J. Tullis Ltd. Lifts: Pickering's Ltd. Painting: Guthrie & Wells. Plastering: R. Y. Ritchie & Co. Ltd. Plumbing: William Fleming & Co. Ltd. Precast Concrete Ground Floor Beams: Girling's Ferro-Concrete Co. Ltd. Precast Concrete Floor and Roof Beams: Concrete Ltd. Press Metal Water Tanks: Braithwaite & Co. Refrigerators and Cold Room: Wm. Kemp & Co. (Refrigeration) Ltd. Reinforced Concrete Foundations: Crowley Russell & Co. Ltd. Reinforced Concrete Mullions: Toffolo Jackson & Co. Ltd. Roller Shutters: William Holt & Co. Roofing: Wm. Briggs & Co. Ltd., The Ruberoid Co. Ltd. Rubbish Hoists: John Bryden & Sons Ltd. Sanitary Fittings: Thomas Graham & Sons Ltd. Steelwork: Redpath Brown & Co. Ltd. Sterilizing Equipment & Electrical Medical Equipment: The Ministry of Works. Terrazzo: John Youden & Sons Ltd. Tiling: Toffolo Jackson & Co. Ltd. Wall Finish 'Emulux': John Youden & Sons Ltd. Windows—Metal: Henry Hope & Sons Ltd.



Ward Blocks

In background: continuation of main spine



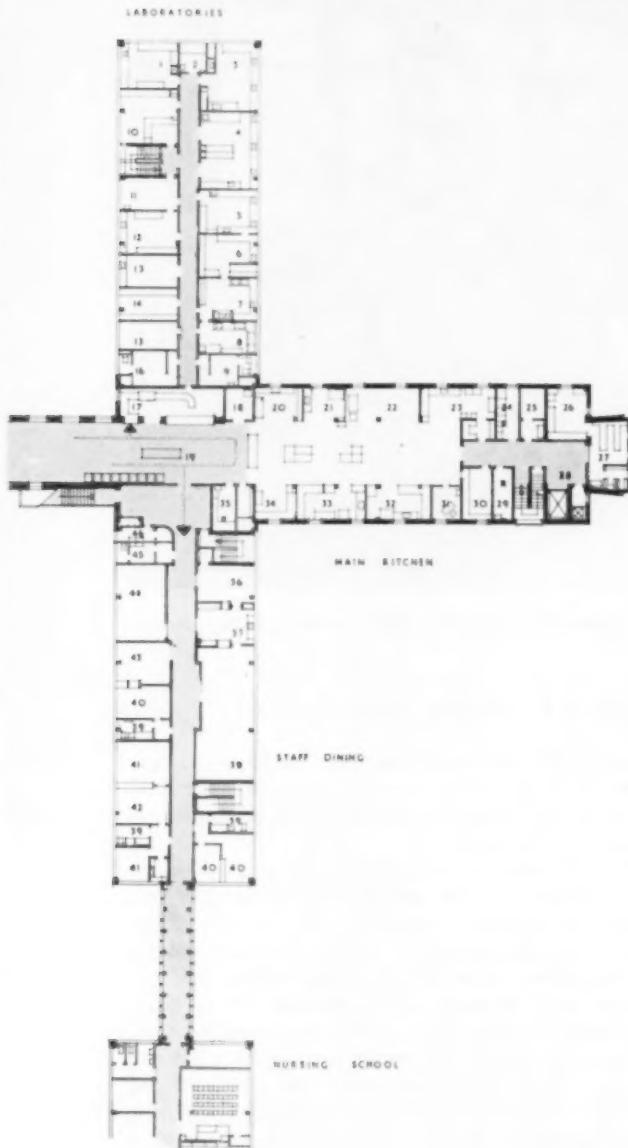


CENTRAL  
SPINE ETC.



## Alexandria Hospital, Dunbartonshire

Continued from p. 389



## KEY:

1. Histology Lab.
2. Balance room.
3. Biochemistry lab.
4. Main lab.
5. Bacteriological lab.
6. Media room.
7. Sterilising room.
8. Wash room.
9. Female lavatory.
10. Receipts and despatch office.
11. Pathologists' office.
12. Pathologists' lab.
13. Centrifuge refrigerators deep freeze.
14. Store.
15. Technicians' room.
16. Male lavatory.
17. Central dishwashing.
18. Trolley washing room.
19. Service area.
20. Pot wash.
21. Fish prep.
22. Boilers and steamers.
23. Veg. prep.
24. Butchers' shop.
25. Cold room.
26. Store.
27. Kitchen store.
28. Lifts.
29. Milk room.
30. Daily issue.
31. Office.
32. Pastry dept.
33. Diet kitchen.
34. Cutting and plating.
35. Crockery store.
36. Domestic staff dining room.
37. Service room.
38. Sisters and Nurses dining room.
39. Bathroom.
40. Doctors' Bed sitting room.
41. Matron's bedroom.
42. Matron's sitting room.
43. Doctors' dining room.
44. Outdoor staff dining room.
45. Staff lavatory.
46. H.M.C.

Reception, Administration

the room, so that a system is used in which the *plan* \* dictates the elevation. If changes are required a partition can be run on any 3 foot 4 inch mullion, and any existing assembly panels replaced with the standard type which best suits the room.

The forty-foot width of the standard unit was chosen to allow double corridor planning, and also to provide a ward width suitable for various bed arrangements. There is no particular reason why the unit should not have been any number of 20 foot bays long, but the 100 foot length was found to be most suitable for the different departments at Alexandria.

The standard unit has been used at Alexandria as follows: Wards (6), Administration (1), Laboratory (1), Operating (1), Pharmacy and Central Sterilizing (1), Radiology and Physiotherapy (1), Staff Dining (1), Teaching school, etc. (1), Sister and Matron living (1), Nurses and Domestic living (3), Reception and Outpatients (1); which equals eighteen units in all. Further units will of course be added as time goes on.

**The Ward Unit**

This is based on the assumption that one sister will control fifty-two beds, which involves the use of two standard units and a link unit. The fifty-two beds are split down into four nursing units of thirteen, each with a nurse's station. The usual arrangement of the thirteen beds is an eight bed ward, a four bed ward and a one bed ward. With different arrangements of standard screen several variations have been used. In all cases the screens are partially glazed and the nurse has complete supervision of all her beds from her station.

The plan of the nursing unit was adopted after it had been proved diagrammatically that end access to a block meant longer walking distances. Noisy compartments, such as the bed lift, ward kitchen, etc., are in the link unit to isolate them structurally from the bed accommodation and the rooms requiring drainage are kept to the inside of the standard units so that the perimeter with the best air and light is left free for bed space. The height of the wards is only nine feet six inches, but this seems satisfactory because the alcove





Typical Ward Unit. Views from Nurse's station shown in bottom picture



### Vale of Leven Hospital

arrangements mean that there are no large compartments on plan. This reduced height, in fact, is an advantage in giving an intimate and non-institutional character to the wards.

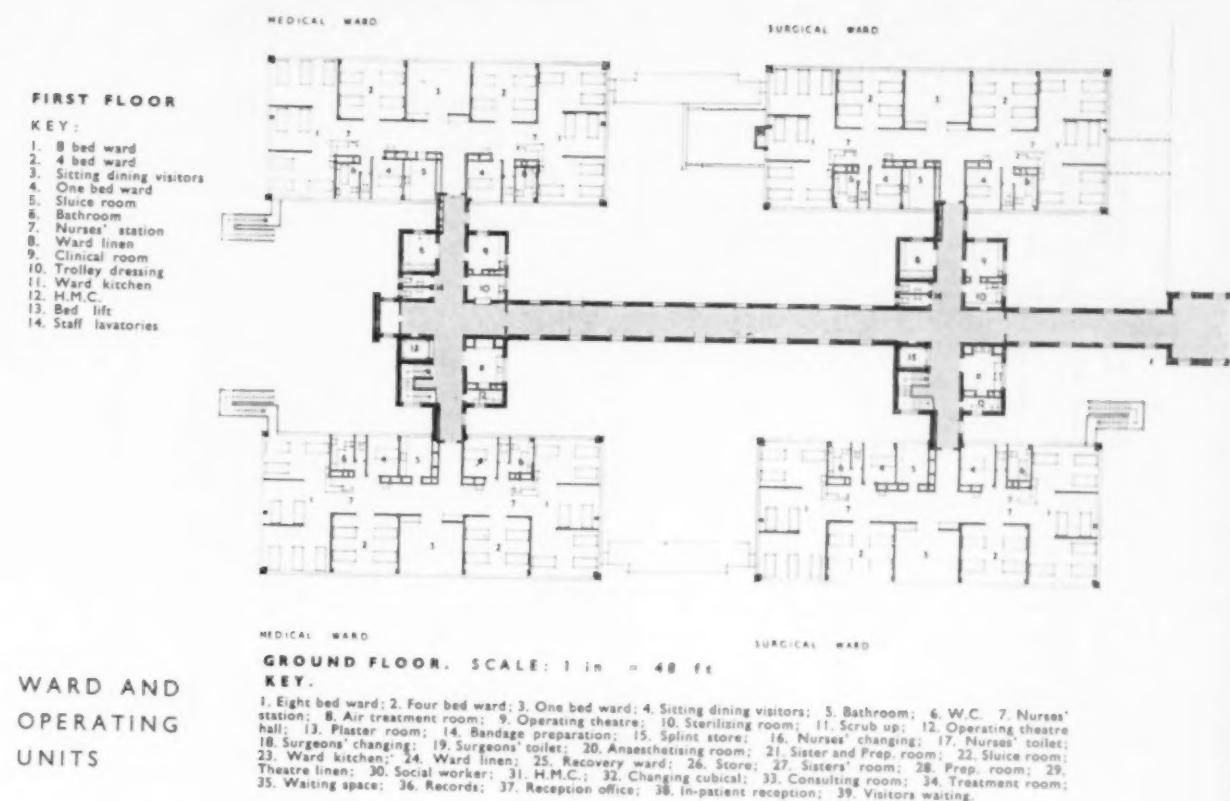
When coming on duty a nurse leaves her cloak in her wardrobe near the staff lavatory in the link unit, taking her handbag and books, etc., to her nurse's station. A nurse's station is an L-shaped counter containing knee space, drawers, filing cabinets, etc., with a dwarf glass screen to cut off draughts, record board and shaded reading light, and small cupboards behind in the storage wall. The station is raised on a low step so that, when sitting, the nurse has a view of her thirteen beds, and, in fact, is only twenty-five feet away from her farthest patient and is quickly conscious of any movement or disturbance. Signal lights from beds are placed so that they can be seen from either of two nurse's stations in case one is temporarily unoccupied.

#### Cost and Progressing

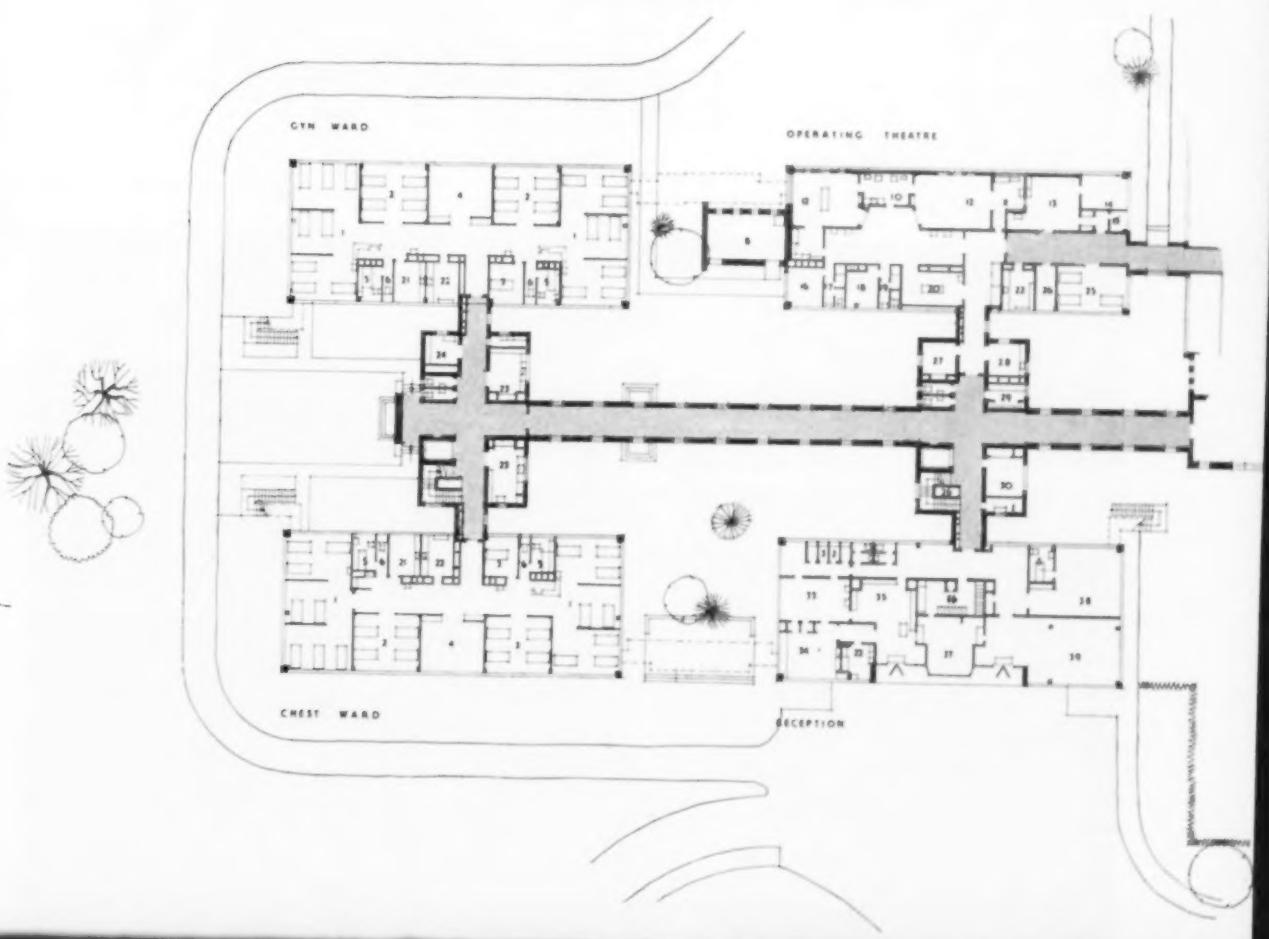
As different hospitals have different site conditions and different proportions of ancillaries it is difficult to compare one hospital with another and arrive at a comparative cost per bed, cost per sq ft or cost per cubic foot. At Alexandria provision was made for a large Laundry to serve the smaller hospitals within the group and in addition an area Laboratory and Offices for the Local Board of Management. If however, the

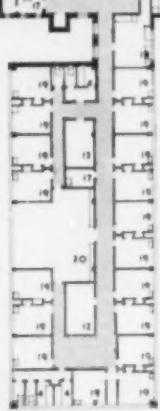
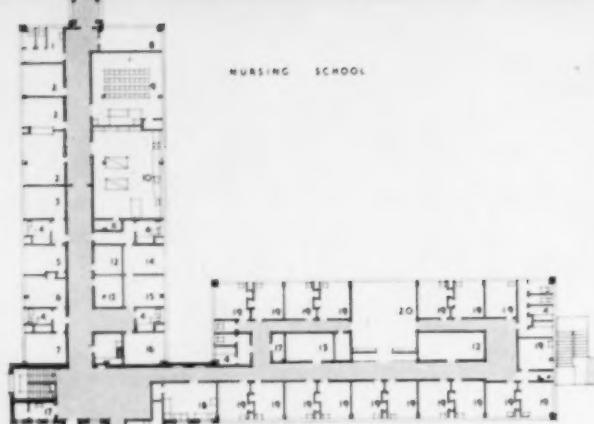
*Continued on p. 394*





WARD AND  
OPERATING  
UNITS





## GROUND FLOOR

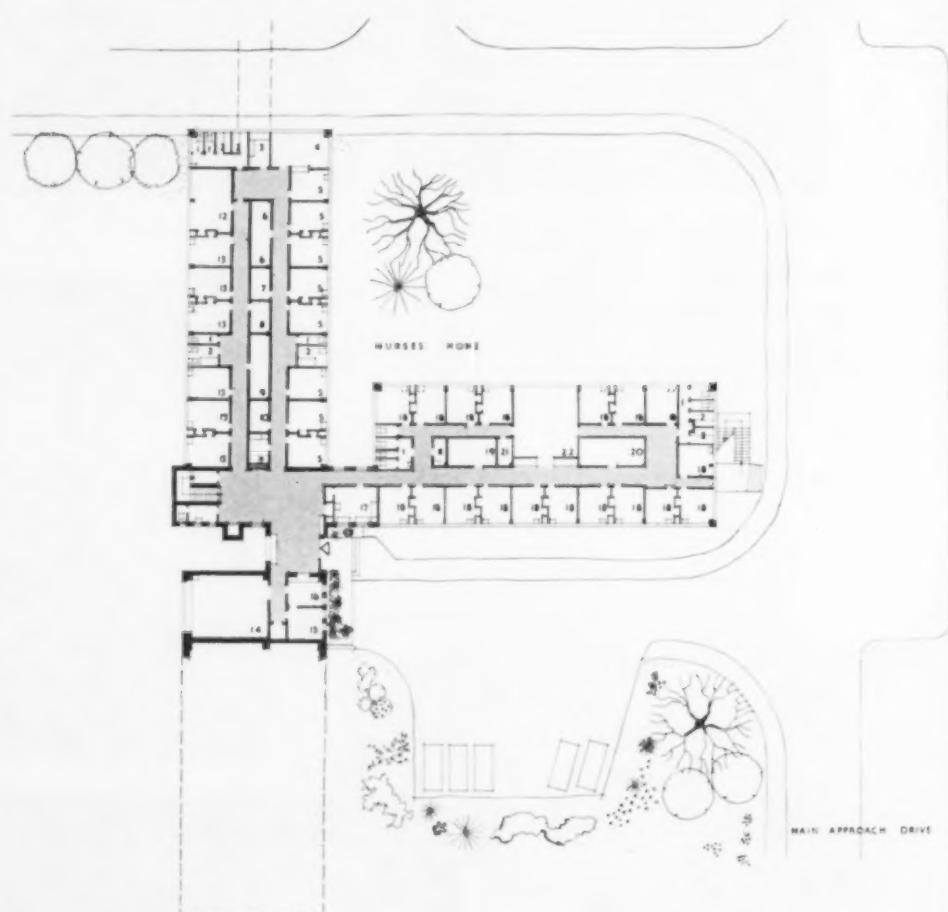
## KEY:

1. W.C.
2. Bath
3. Kitchen
4. Domestic staff sitting room
5. Domestic
6. Domestic trunk store
7. Domestic linen store
8. Sister linen store
9. Sister trunk store
10. General store
11. H.M.C.
12. Sisters' sitting room
13. Sister
14. Games room
15. Visitors
16. Office
17. Laundry and kitchen
18. Nurse
19. Linen
20. Trunks
21. Store
22. Nurses' sitting room

## NURSES HOME

## FIRST FLOOR SCALE: 1 in = 48 ft

1. Staff lavatories
2. Study rooms
3. Sister tutor
4. Bathroom
5. Night supervisor
6. Domestic supervisor
7. Home warden
8. Staff room
9. Lecture room
10. Demonstration room
11. Store
12. Trunk store
13. Linen store
14. Assistant Matron
15. Kitchen supervisor
16. Laundry supervisor
17. H.M.C.
18. Laundry and kitchen
19. Nurse
20. Sitting room



## Vale of Leven Hospital, Dunbartonshire

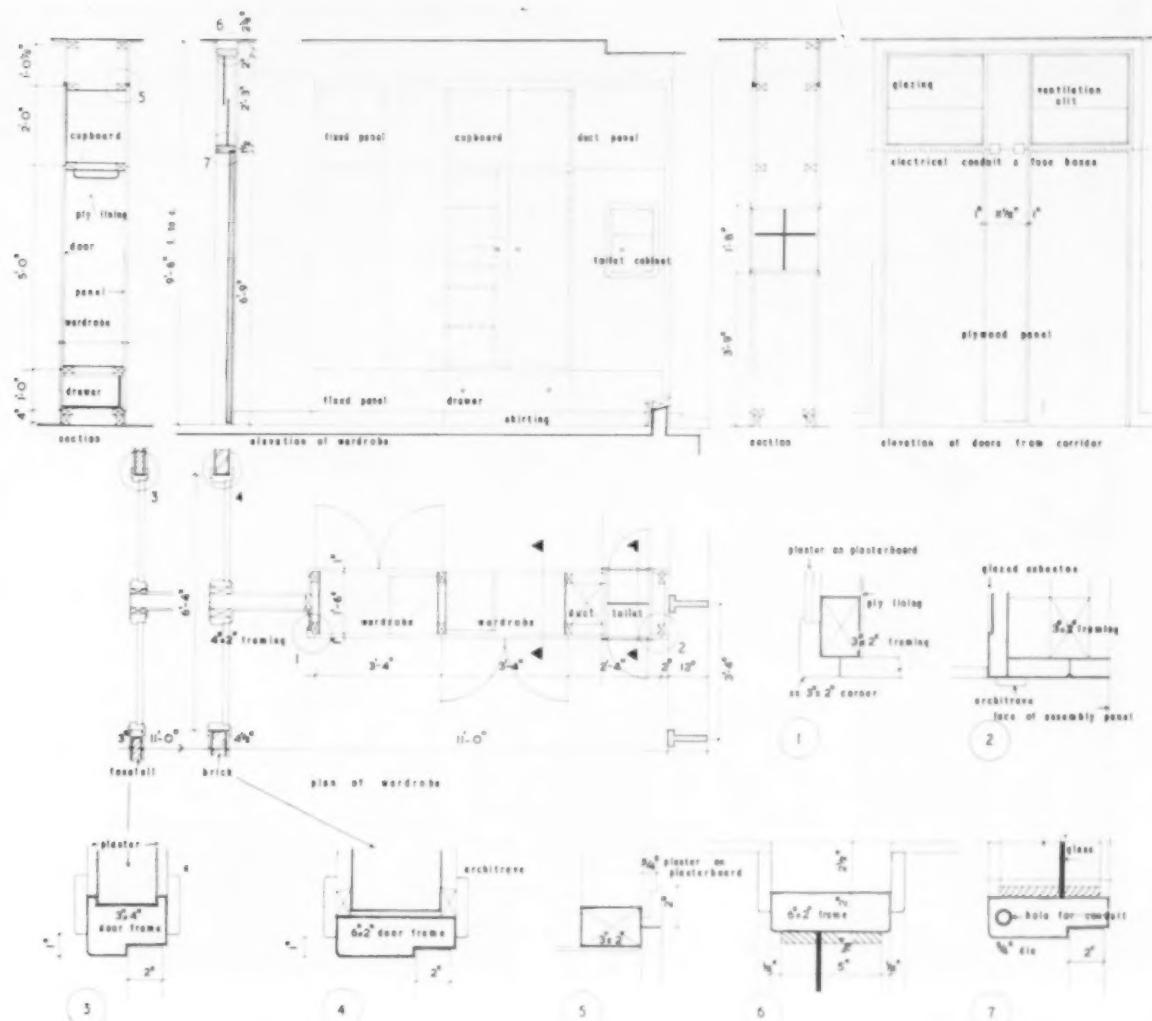
Continued from p. 392

tender cost of the Ward Unit is analysed it is possible to work out an actual cost per bed at normal spacing. The contract for the Hospital was let out in two stages for speed of building and to ensure an early start on site, and as a result, it was possible to compute the bed costs on Stage I tender figures which were for wards only or nursing units including their ward kitchens, ward linen, housemaids closets, sisters' rooms,

preparation rooms, staircases, entrances, bed lifts, etc., and including all services and built in fittings. The cost per bed based on this calculation worked out at £710 per bed, based on the 1952 tender figures. Cork floors to the wards, first class ironmongery, a plastic finish to some of the woodwork have been used to give a good standard of internal finish.

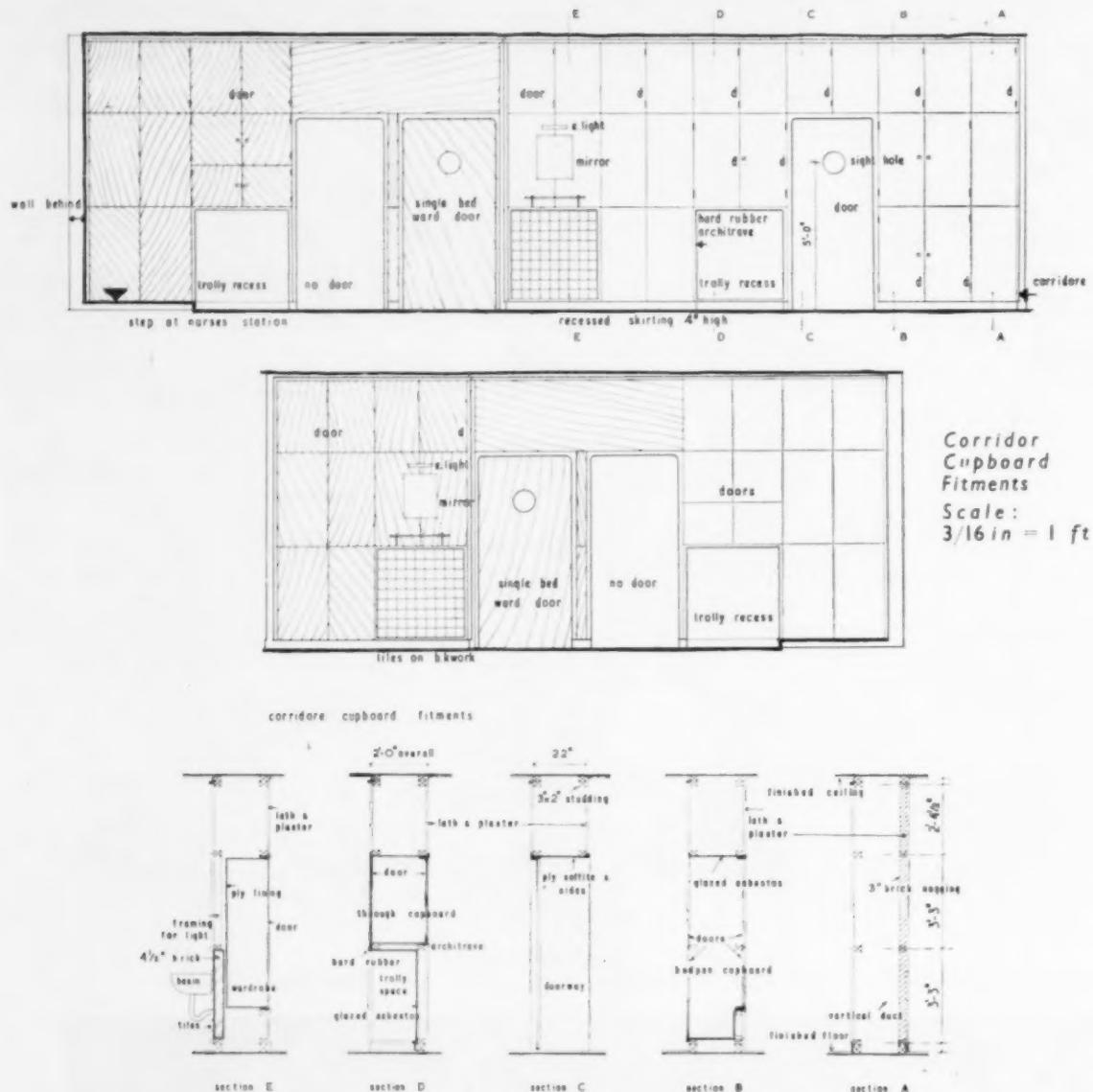
The gross total cost of the Hospital is not yet avail-

Continued on p. 396



Wardrobe fitting between Nurses' bedrooms. Scales 1 in. = 1 ft. 1 in. = 1 in. Below Nurses' dayroom





### Vale of Leven Hospital, Dunbartonshire

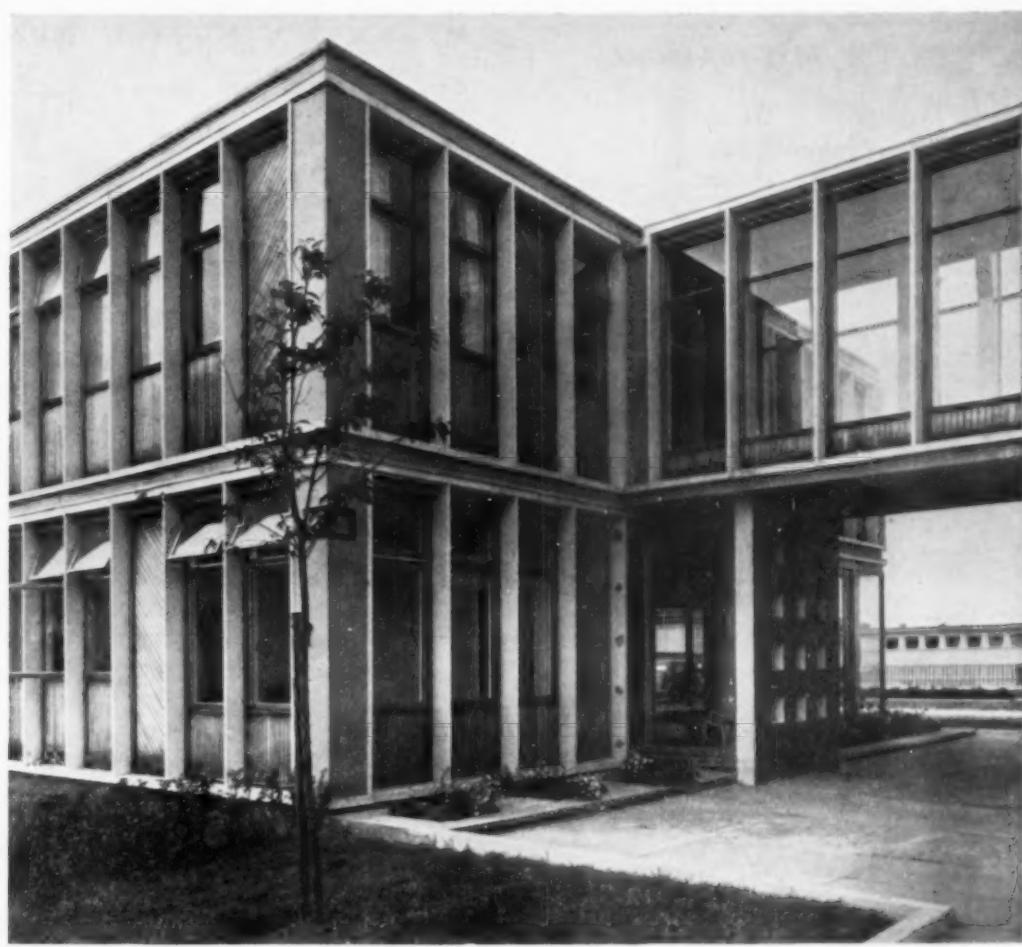
Continued from p. 394

able but again based on tender figures the cost per sq ft of floor area worked out at approximately 81s 4d per sq ft and cost per cu ft 5s 1½d. This, however, did not include the cost of moveable equipment by which is meant electro-medical equipment, medical furnishings, furniture and furnishings. The final cost of such moveable equipment cannot yet be determined accurately, but the estimated cost was £600,000 for the construction work.

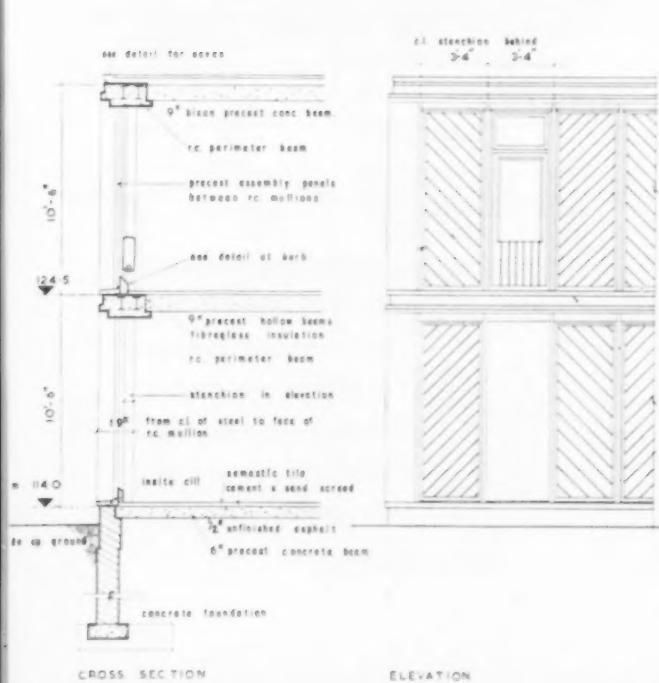
The construction of the Hospital has progressed satisfactorily and quite quickly. The main contract took just over 2½ years and the installation of moveable equipment and specialist services prolonged the construction period for a further six months. The use of the standard unit helped considerably in organising

the progress on site, as it was possible when carcassing the building to erect the steelwork for a unit in a week on prepared foundations, four or five days for the erection of the precast concrete beam roof to each unit and reinforced concrete mullions and assembly panels could be erected at the rate of thirteen and eight per day respectively. By pre-ordering materials in short supply it was possible to carcass and clad a standard unit in approximately twelve weeks from commencement. The standard units were subsequently started at weekly intervals to ensure continuity from one unit to another.

The Civil Engineering contract commenced in the autumn preceding the start of the main building contract.



Five standard types of assembly panel were fabricated. The timber covered portion consists of  $\frac{3}{4}$  in T & G Western red cedar on building paper and insulation board and  $\frac{1}{2}$  in bitumen bonded glass wool with an air space

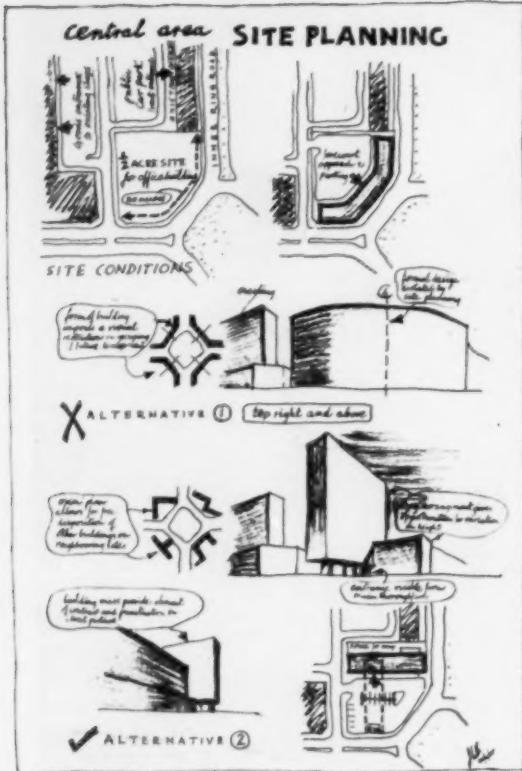


Interior of bridge

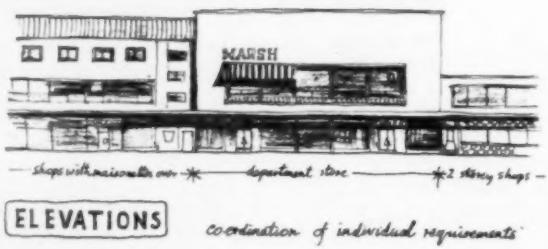
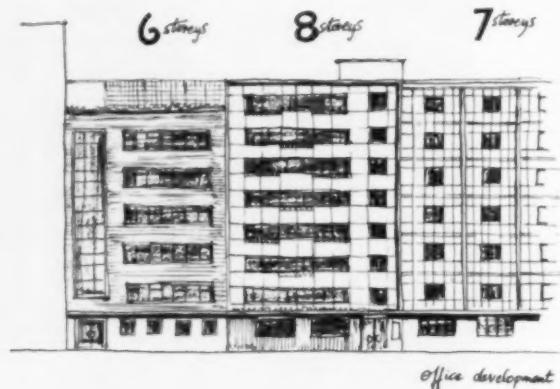
SCALE: 1 in = 8 ft

## Planner's Sketch Book

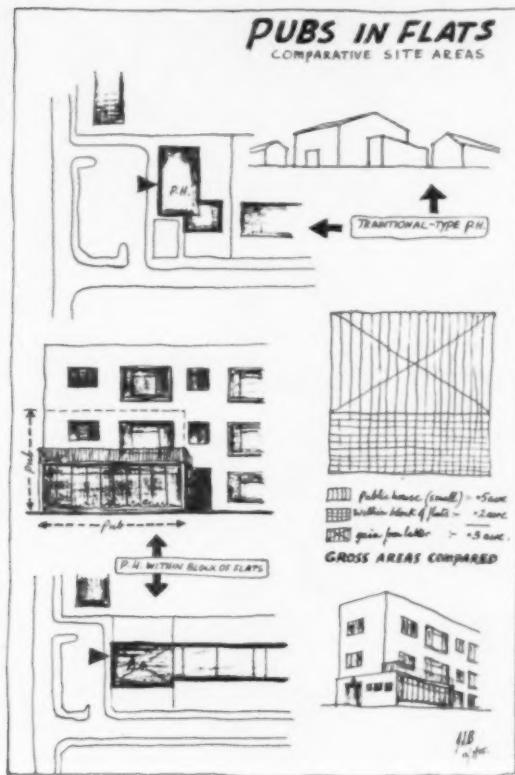
BY J. L. BERBIERS, A.R.I.B.A., A.M.T.P.I.



A series of sketches or case book studies dealing with subjects of general planning



interest and illustrating the thoughts which occurred to the planner in considering their aesthetic and practical implications. Some of the studies are



theoretical; others are based upon actual problems of every day planning practice. The sketches show also



the technique developed by the author in order to explain, graphically, the points he wished to emphasise.



*View from South with Sculpture by R. Pope in foreground*

## **BIRLEY INFANTS' SCHOOL**

**for Derbyshire County Council**

**F. Hamer Crossley, Dipl. Arch. L'pool,  
F.R.I.B.A., County Architect**

**F. K. Hicklin, A.R.I.B.A.  
Assistant County Architect, New Schools**

**D. L. Turnbull, A.R.I.B.A., Dipl. T.P.  
Section Architect**

**P. Richardson, Dipl. Arch. A.R.I.B.A.  
Assistant Architect**

**S. Mansey, Clerk of Works**

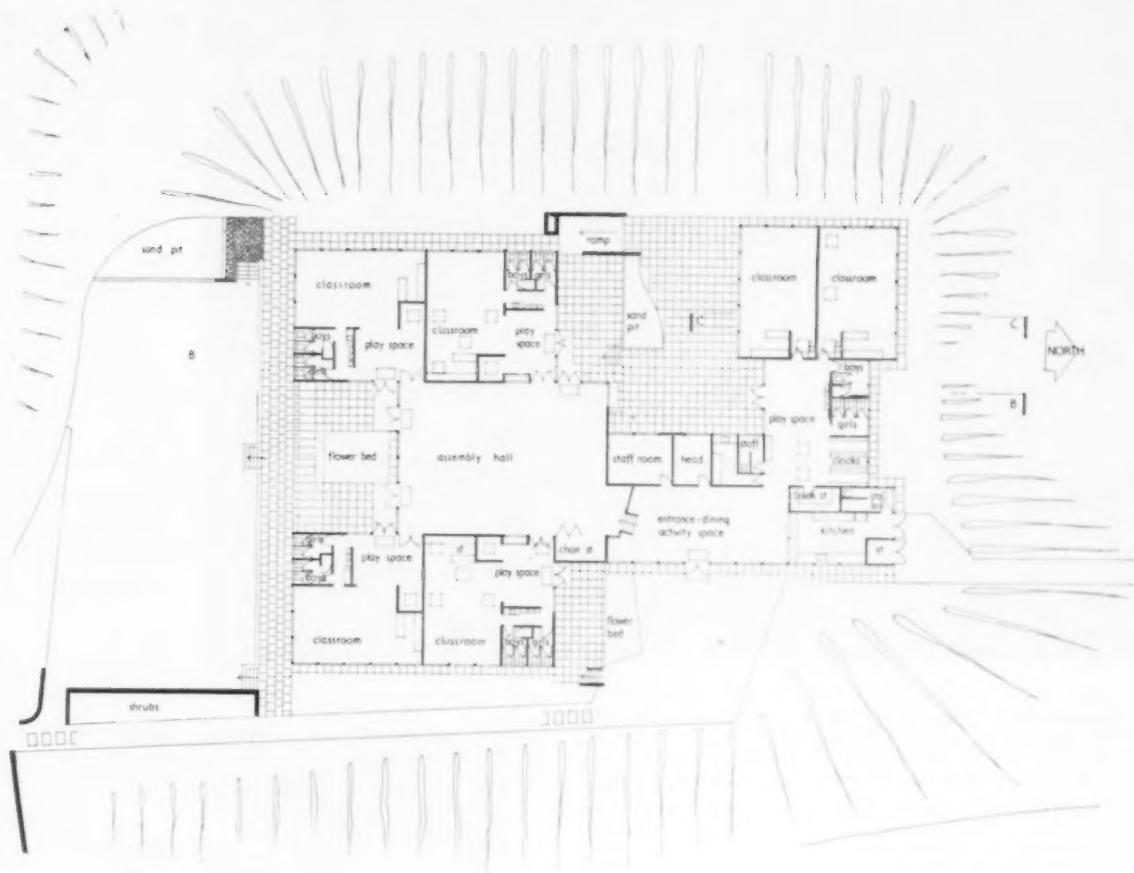
**School: Two Form Entry Infants' School  
Total 240 Pupils.**

**Site: 1½ acres approximately, situated on  
Thornbridge Avenue, Birley.**

**O**NE of three Schools planned on the same site to provide school places for the Sheffield overspill, Birley Infants' School was erected in a period of four months using the "Derwent" system of prefabrication. The Ministry of Education approved figure was £37,060.

The School is planned with the Assembly Hall as the focal centre with four teaching spaces planned around it whilst the other two teaching spaces are planned separately.

It will be seen that the entrance hall can be used for dining purposes and has a small service hatch to serve mid-day meals from the service kitchen.



Entrance and Dining Space. Sculpture: R. Pope

The School is planned to give maximum teaching space, each space having its own working area with cupboards, worktops and sink. At the same time a domestic atmosphere is created by reducing the ceiling height to 8ft 0in whilst still providing adequate ventilation.

The toilet facilities form part of the teaching space and in this way, each class becomes a self contained unit.

The heating is by warmed air, the hot water being ducted from the centralised boiler house in the nearby Secondary School. Meals are also cooked in the Secondary School Kitchen.

Colour has been chosen to give an atmosphere of lightness with relief in bright colours. Mr. Ronald Pope, the sculptor was commissioned for the sculpture in the Entrance Hall which he designed in wire, and he was also responsible for the design of the play equipment on the Hard Play area.





Classroom with  
Staff rooms and  
Assembly Hall  
in background

Classroom

DERBYSHIRE COUNTY COUNCIL : BIRLEY INFANTS'  
SCHOOL

General Contractors: Messrs. W. Malthouse Ltd.

Timber Structure: Messrs. Vic Hallam Ltd. Curtains: Messrs. Hope and Wild. Physical Education Structures: J. W. Andrews Esq. School Name Board: Derby Signs. Sculpture: R. Pope Esq. Letters to doors: The Lettering Centre. Heating: Weatherfoil Heating Systems Ltd. Tarmacadam: Chesterfield Construction Co. Clocks: Messrs. John Smith and Sons Ltd. Furniture: Messrs. Geo. Hammer & Co. Ltd. Door mats: Midland Institute for the Blind. Landscaping: Messrs. Bradshaw Bros. (Construction) Ltd. Wood Floors: Messrs. Hollis Bros. Ltd. Cork and Pitchmastic Floors: Pitchmastic Asphalt and Paving Co. Ltd. Blinds: Messrs. J. Avery and Co. Ltd. Ironmongery: Messrs. Bennetts (Irongate) Ltd. Sanitary Fittings: Messrs. Woodhouse and Co. Ltd. Electrical Installation: Derbyshire County Council Works Department.



Classroom with cloaks and entrance in background



Assembly Hall

## THE DIARY OF A BOILER - II

*It was not expected that the Editor would print the Author's complaint about his boiler troubles (see issue of 15th September), but since this was printed readers may like to have a sequel as the end of the story has not yet been reached.*

### August 22nd

*The electrician called to complete the reconnection of the thermostat and assured the owner that his part of the work was satisfactory.*

### August 23rd

*The builder sent a man to joint the smoke pipe. This was completed but it was asked that the boiler should not be lit until the heating engineer had sent his man to test the installation.*

### August 24th to 26th

*Telephone calls did not produce the heating engineer's man so, in desperation, the owner lit the boiler.*

### August 27th

*The owner awoke about 7 a.m. and quickly realized that the atmosphere appeared to be extremely hot. An investigation showed that the boiler temperature was 210°F, the maximum which the temperature control dial was capable of showing. Frantic efforts were immediately made to draw off hot water from various taps in spite of the risk to sanitary fittings, and the temperature was reduced to about 190°F, but still the boiler seemed to be burning just as fast and the water temperature commenced to rise again although the thermostat was set at 150°F. At 9 a.m. an urgent request for help was telephoned to the builder who could offer little useful advice. He promised to send help as soon as possible. The occupier then opened the flue access doors which slowed down the rate of burning, and more water was drawn off until the temperature was at a point when it was possible to check whether or not the thermostat operated the air controls at desired temperatures. It was found that the thermostat appeared to be operating correctly. At last the fuel supply in the boiler burnt out permitting the system to cool off. However, no one called that day from the builder, heating engineer or the boilermaker.*

### August 28th to 30th

*Still no one called in spite of frequent telephone calls.*

### August 31st

*A further telephone call to the builder resulted in a statement that a fitter would be coming that day. He arrived about 12.30, looked at the boiler, refixed the casings and said the trouble was due to the electric fan being improperly adjusted but how he knew this is a mystery, as he did not light the boiler nor, in fact, has the boiler a fan. He left the house about 2.30 saying he would ask the electrician to call. The owner's wife still being without hot water, except for a small immersion heater, again telephoned the builder asking him to send the boilermaker's service engineer, on the assumption that he at least should know whether the boiler operated with or without a fan, and that if the fault was the absence of a fan, he would be able to bring one and would know where to fit it.*

*At 6 p.m. the owner returned home to receive the daily report but there was still no hot water, no representative*

*of the boilermaker and the boiler-room floor was dirtier and wetter than before and a few less screws appeared to be in the boiler casing.*

### September 1st to the 8th

*In spite of frequent calls nothing happened.*

### September 9th

*A representative of the heating engineers called saying that the electricians and the boilermakers were also sending representatives that afternoon to see the boiler. The heating engineer looked at the boiler and said that he could see nothing wrong, nor could he account for the overheating. It was pointed out that the casing did not fit properly, screws were missing, nuts were put on with cross threads and would not tighten and generally the installation did not look very good. He said that he would send the fitter to adjust the boiler and at the same time the fitter would tighten the leaking joint on the flow pipe and on one of the radiators. The electrician also arrived and checked his work and said he could find no fault.*

*In due course an engineer from the boilermaker's arrived and immediately on seeing the boiler said that it was incorrectly assembled as the fitter had not taken sufficient trouble to clean off the gaskets from the attachments before installing them on the new boiler so that air was leaking into the fire box from several places when the thermostatically controlled inlet was closed. In view of the many troubles so far with the installation the boilermaker undertook to send his own service engineer to reassemble the boiler correctly and it was agreed, to meet the convenience of the owner's wife, the service man would arrive after lunch on September 15th.*

### September 15th

*The owner arrived home expecting that the boiler would be working, only to be greeted by his wife's saying that she had stayed at home for the whole afternoon but no representative of the boilermaker had appeared. It was then too late to take action that night so a telegram was sent to the boilermaker asking for urgent service.*

### September 16th

*The telegram resulted in a telephone message to say that the service engineer had been delayed on the previous day and had been unable to come as arranged! He would not now be available until the afternoon of September 21st (6½ days) and when pressed for greater urgency said that they had no other man to send before that date!*

*It seems astonishing that firms cannot keep appointments or even have the courtesy to write or telephone when they cannot be kept so that others do not waste their time waiting for those who know they cannot arrive. It is this sort of thing that tends to make building unnecessarily expensive. Further, however good a product made by a firm may be, actions of this nature do not encourage the placing of future business or recommendations, since it appears that such firms are doing too well to be interested in what happens to their products, or in their customers.*

*The owner now looks forward to September 21st, and perhaps still further to the day when he may use his boiler. It is now only four months since the leak was first reported!*

*Incidentally the heating engineer's promise to send a fitter to stop the leak on the flow pipe joint and on the radiator has not yet materialised.*

*The author intends to inform the Editor when the work is completed and in the meantime is saving up for a celebration.*

## TIMBER NOTES

THE softwood market is now reaching an overfed stage. From the contracts placed and the good progress being made with shipments to this country, the imports for the year are showing every indication of reaching a figure which will be better than any year since 1938.

The demand for softwood has been slightly higher this year than in 1954, but the credit curb and difficulties with bank loans have tended to slow down this demand a little. This was something the timber importers did not expect, so they have really bought more than they need. Stocks will be increasing when few importers wanted this to happen.

This surfeit of softwood timber accounts for the refusal to buy some of the Russian and Baltic parcels now being offered for late shipment at prices well below those which have been quoted for the past six months. The quantities involved are not large, and they should not be taken to indicate any real weakness in the softwood market, but the fact that few of these offers are being taken up does show that timber finances are strained and stocks heavy.

The actual trend of softwood prices on this market has been upward. Importers have been faced with higher freight rates and heavier costs following the dock strike, so they have been forced to fix higher re-selling prices. The exceptions can almost always be attributed to firms having to sell quickly to raise funds. This present state of the market will probably continue for several months, with little chance of cheaper softwood.

With an import of over 1,700,000 standards in sight, the architect and contractor will be able to rest assured that all building requirements will be met readily from stock, especially as a balance has been created in joinery timbers. No shortages now exist, nor are they likely to appear within the next four or five months.

Hardwood stocks have been remaining roughly on the same level, the reduced demand being matched by slightly smaller buying. Prices are on the upgrade, due mainly to increase freight rates either already chargeable, or shortly to be charged, from Africa and the Far East. Shippers have already hinted at higher ramin prices, while the good domestic North American market is preventing any fall in values for dollar hardwoods. So far the prices have made users shy of taking up the full import quantity permitted under the dollar hardwood import scheme. Some species may be short locally, but the general situation in hardwoods is of adequate stocks to meet the limited demands of the building trade.

Plywood stocks are extremely heavy, due to small buying on the part of the furniture manufacturers. Some lower prices have already been

quoted, and weakness may continue in the home market, even though the shippers are keeping their prices at the same level, whether it be Finnish birch, Russian alder or Japanese lauan.

Hardboard and insulation board are now well stocked. Every effort is being made within the trade to keep the market steady, but cut prices continue to be quoted by some stock holders anxious to improve their selling. This tendency will diminish in the next month or so as all the wallboard bought at the lower prices is cleared from stock.

Some contractors report they are not always able to obtain their supplies of these boards, in spite of such statements that the country is overstocked. Taking the very heavy imports of this year and the known level of consumption, then stocks must be high, but this does not prevent local shortages appearing temporarily for reasons of shipment. Again, some contractors speak of particular boards when they talk of supply difficulties, and with more than 200 boards on the market it is obviously impossible for merchants to carry a full stock. But hardboard and insulation board as such are plentiful.

A special effort is to be made next year to boost Canadian softwood timbers by spending money on a scheme for houses in the North American style, with a timber frame and a brick veneer. This system is claimed to be cheaper than the traditional brick house and to give superior insulation qualities which make possible savings in fuel. It is understood that some Canadian architects may be brought to this country by the timber shipping organisation to talk to British architects about this type of building. The shippers are now devising plans for such houses with the Timber Development Association.

## SPBE CONFERENCE NORWICH

The Sixteenth National Conference for the Preservation of the Countryside will take place at Norwich on October 7th and 8th (H.Q., The Royal Hotel). Papers will be read by Mr. S. L. G. Beanfay, M.o.H. & L.G., on "Development Plans and Rural Preservation"; Mr. K. L. Kelly, of the Automobile Association, on "Roads in the Landscape"; Mr. T. B. Oxenbury, County Planning Officer, E. Suffolk, on "Some East Anglian Problems," and there will be an informal discussion at which Sir Patrick Abercrombie is to preside.

The conference is not confined to members. Full details and delegate's forms may be obtained from the Secretary of the C.P.R.E., Mr. H. G. Griffin, C.B.E., 4, Hobart Place, S.W.1.

The Minister of H&L.G. has authorised the payment of expenses to the

conferences of not more than two delegates from local authorities.

## MINISTRY OF WORKS

### 1955-56 WINTER LECTURES

The seventh season of winter discussion lectures, arranged by the Ministry of Works on subjects of interest to the building industry, starts in October. The programme for October is as follows:

**WALSALL**—Wednesday 5th at 7.15 p.m. *Soil Mechanics in the Building Industry. (Construction of Foundations).* Speaker: M. W. Leonard, of Soil Mechanics Ltd. At the Technical College, Walsall.

**LIVERPOOL**—Wednesday 5th at 7.15 p.m. *Good Practice in Plumbing.* Speaker: R. T. Gillet, Senior Sanitary Engineer, Ministry of Works. At the College of Technology, Byron Street.

**SWANSEA**—Wednesday 5th at 7.0 p.m. *Pipes and Pipe Laying.* Speaker: N. W. B. Clarke, Building Research Station. At the Manor Hall, Central Y.M.C.A., The Kingsway, and

**LLANELLY**—Thursday 6th at 7.0 p.m. at the Gymnasium, Teachers College, Alban Road.

**MANCHESTER**—Thursday 6th at 7.15 p.m. *Common Defects in Building.* Speaker: H. J. Eldridge, Chief Experimental Officer, Building Research Station. At the Lecture Theatre, Gas Board's Show-rooms, Town Hall Extension.

**CHATHAM**—Monday 10th at 7.15 p.m. *Thermal Insulation.* Speaker: J. A. Godfrey, Building Research Station. At the Medway College of Technology High Street.

**CHELMSFORD**—Tuesday 11th at 7.30 p.m. *Lightweight Concrete.* Speaker: W. Kinniburgh, Building Research Station. At the County Hotel, Rainsford Road.

**BOGNOR REGIS**—Wednesday 12th at 7.0 p.m. *An Introduction to Prestressed Concrete.* Speaker: R. C. Blyth, Cement and Concrete Association. At the Technical Institute, Southway.

**SCARBOROUGH**—Wednesday 12th at 7.0 p.m. *Modern Paint Developments.* Speaker: J. W. Wilson, Leyland Paint and Varnish Co. Ltd. At the Public Library, Vernon Road.

**BURTON-ON-TRENT**—Wednesday 12th at 7.15 p.m. *Powered Hand Tools.* Speaker—A. F. Coare, A.B.I.C.C. At the Technical College, Union Street.

**PRESTON (LANCS.)**—Wednesday 12th at 7.0 p.m. *The Thermal Insulation of Buildings.* Speaker: J. Lawrie, London Manager Fibreglass Ltd. At the Derby Room, Bull and Royal Hotel.

**GT. YARMOUTH**—Wednesday 19th at 7.30 p.m. *Problems of Plastering and Rendering.* Speaker: L. A. Ragsdale, Building Research Technician, George Wimpey & Co. Ltd. At the Technical College, Lichfield Road, Southtown.

### MINISTRY OF WORKS — 1955/56 WINTER LECTURES

Please note that the lecture at Reading on October 18th ("Introduction to Prestressed Concrete") listed in the Press Notice M.O.W./52/55 which was issued on September 6th, has been cancelled.

**ADDENDUM: NEW T.A. CENTRE, HEMEL HEMPSTEAD**

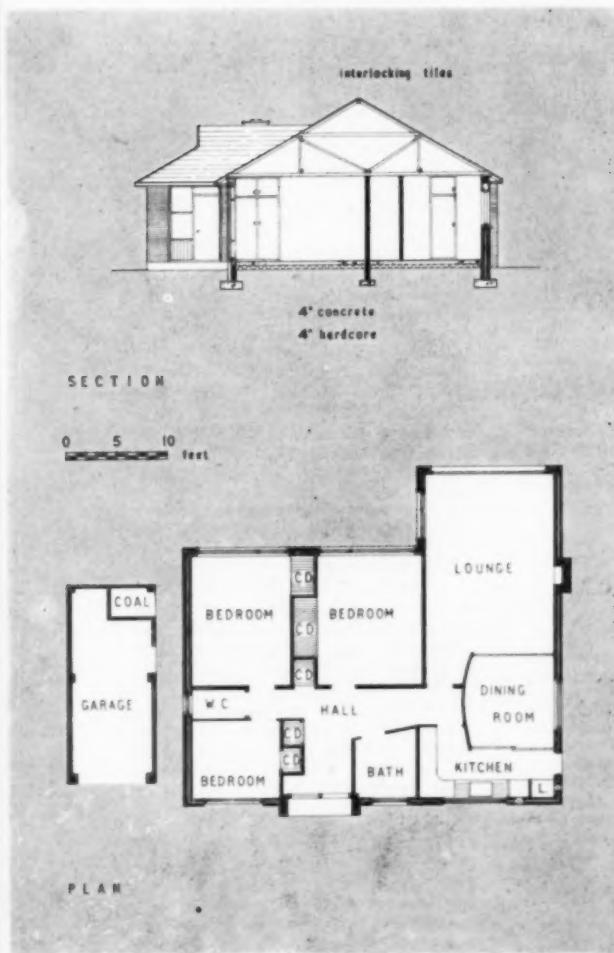
The new T.A. Centre at Hemel Hempstead published in our last week's issue was supervised by Mr. D. Hodgkins of Brian L. Sutcliffe & Partners, Chartered Architects and Chartered Civil Engineers.



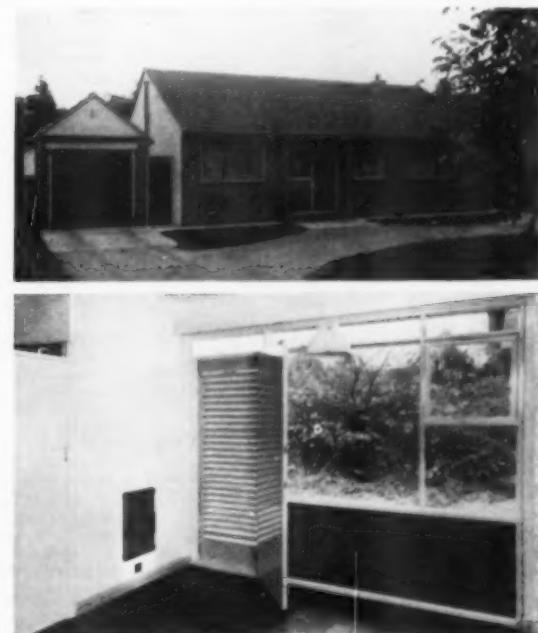
Garden Elevation

**Bungalow  
at Purley**

designed by: R. G. R. HAGGARD, A.M.I.C.E., A.M.T.P.L.



THIS single storey house at Purley, containing three bedrooms, lounge, hall, kitchen, bathroom and separate w.c. was built and sold as a speculation for £3,150. This included £540 as the cost of the land and £80 professional fees. The doors to the bedrooms on the garden side are of twin construction, outside are slatted doors permitting penetration of light and ventilation, inside are flush panelled doors of normal construction. The General Contractor was F. H. Claridge & Sons Ltd., of Wallington.



## MOSAICS

### SERVICES

#### WATER HEATING B6/34

The "Agamatic" model 30/80 domestic boiler by Aga Heat Ltd., of 20 North Audley Street, London, W.1, is suitable for small to medium size homes. Designed specifically to burn coke, it will stay alight continuously and requires attention only twice in 24 hours. Thermostatic control is incorporated and the boiler provides from three baths a day to three an hour as well as heating radiators where a limited amount of central heating is required. The grate is circular and a foot pedal operates the ashpit door. Finished in cream and black vitreous enamel. Dimensions: Width 1ft. 9in. x depth 2ft. 0in. x height 2ft. 11in.

### SERVICES

#### PLUMBING B4/31

The range of "Rainbow" water taps, by J. F. Finnegan & Co. (Sheffield) Ltd., of 847 Ecclesall Road, Sheffield 11, includes bib, basin pillar and bath pillar taps in matching style. The main bodies are finished in chromium plate and special features include quickly detachable, interchangeable plastic outer bodies in various colours and black. A built-in overhead automatic valve cuts off water if the main washer is withdrawn for service. The main washer is of long-life nylon type. "H" and "C" are indicated by inset ruby and emerald stones mounted in the head of each tap.

### PLANT

#### HAND TOOLS E3/45

The "Handiseal Gun" is a robust caulking gun developed by Expandise Ltd., of Chase Road, London, N.W.10, for the application of their flexible sealing compound "Seelastik". Pressure on the trigger operates a plunger which forces the compound through the nozzle directly into any hole, gap, crack or joint which requires sealing. When the gun is empty it is a simple matter to re-charge with a handipak refill. It is claimed that sealing jobs can be carried out with very little practice.

### FITTINGS

#### MISCELLANEOUS C11/9

The "Velopa" bicycle holders have been developed by Le Bas Tube Co. Ltd., of 129 Finsbury Pavement, London, E.C.2. The holders are made from steel tubing and bar and are heavily galvanised after manufacture. They may be fixed by bolting, screwing or grouting to any kind of wall or post. The serrated arms of the holder grip the tyre only and cycles can be fastened by padlock and chain. Self supporting batteries can also be supplied.

## INDUSTRIAL NOTES

● The Society of Industrial Radiology and Allied Methods of Non-Destructive Testing commences its winter programme during October. Particulars are obtainable from the Honorary Secretary, Mr. D. N. Laurie, 2 Tomwood Terrace, Barkingside, Essex.

● A further yearly course on the Design of Welded Structures is to be held at the Institute of Marine Engineers, 85, Minories, London, E.C.3. The course will commence on November 1 and lectures will be given every Tuesday and Thursday evenings from 4.30 to 6.30 over a period of seven weeks until December 15, 1955.

● The British Welding Research Association is arranging a number of meetings on Increasing Productivity by the Use of Welding to be held at various centres throughout Great Britain.

● At the request of certain authorities of the Central Council for the Care of Churches, the National Gallery and the British Museum, two of the chief scientists of Desowag, the largest mycological and entomological research centre in Europe, were invited to speak on the timber preservative Xylamon, which has recently been introduced to this country.

● The British Plaster Board (Manufacturing) Ltd. announce that Messrs. Brunton, Baden Hellard & Partners, A.R.I.B.A., have been appointed consulting architects to the company.

● On Wednesday, July 20, Messrs. Henry Boot & Sons (Reema) Ltd. had the pleasure of entertaining a Russian Housing Delegation at their factory at Chesterfield and at a housing site in the vicinity, at the request of the Ministry of Housing and Local Government and Ministry of Works.

● The British Non-Ferrous Metals Federation states that the industry does not agree that its practices are against the public interest. This follows the Monopolies and Restrictive Practices Commission's report on the supply and export of certain semi-manufacturers of copper and copper-based alloys.

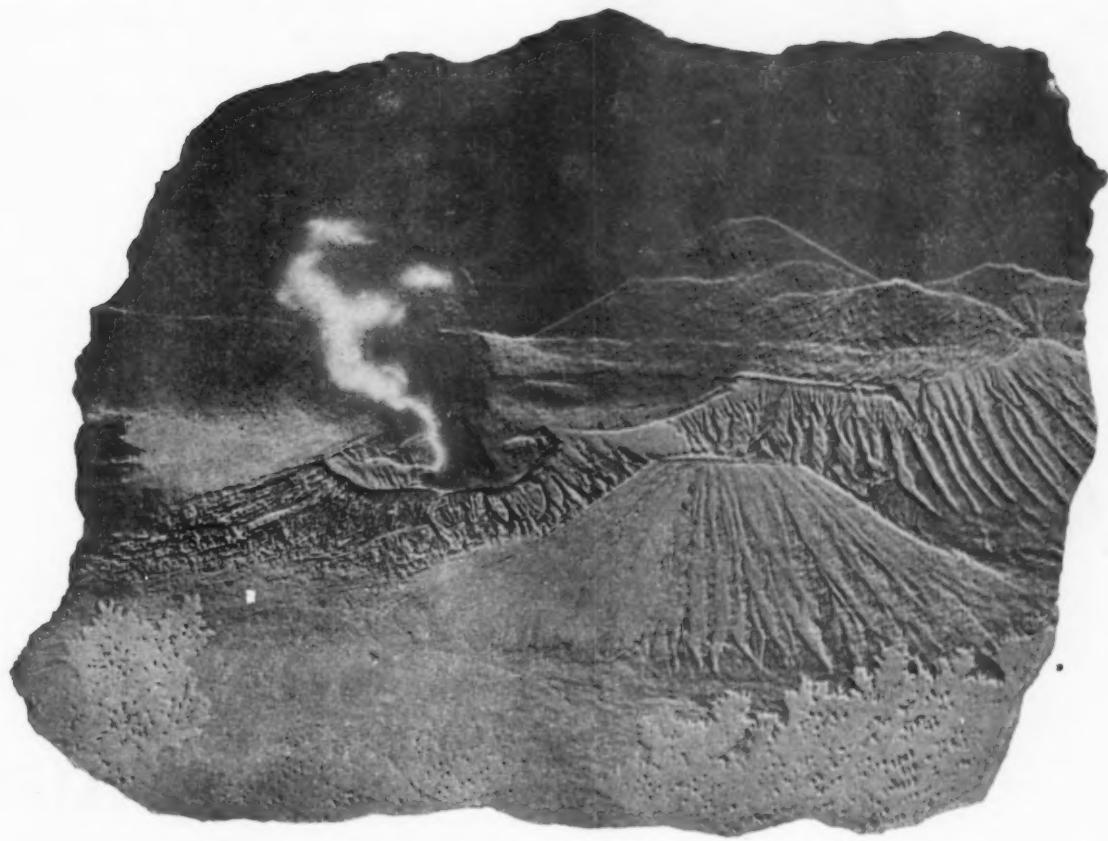
● The first facing brick plant to go into production in Scotland, making domestic facing bricks of the Accrington type and light engineering bricks, went into use on September 5 at Newton, Blantyre-ferme, Uddingston, Lanarkshire. Built by the Scottish Division, National Coal Board, the new brickworks will work up to a weekly total of 100,000 bricks.

● Building operations began on September 1 at Millboard Works, Sunbury-on-Thames, on the foundations for a new hardboard manufacturing plant, for P.I.M. Board Co. Ltd.

● The address of the United Kingdom Trade Commissioner office in Toronto, Canada, is now: 119 Adelaide Street West, Toronto, Canada, telegraphic address: Toroncom Toronto, telephone No. Empire 2-1223.

### CORRECTION

● The telephone number of Compactom Ltd., Oxtgate Lane, Cricklewood, N.W.2, is Gladstone 6633. The number which appeared in our issue of September 8 was incorrect.



## Useful things volcanoes

You may be right, but why bring that up here ?  
Because that most remarkable pre-mixed plaster, Perlited Carlite, begins as volcanic rock.

Very interesting but what is so good about Perlited Carlite.

It has tremendous advantages because of its lightness. Perlited Carlite weighs only a third as much as sand-based plasters. Reduction in heavy work increases the plasterer's output. Many incidental expenses are reduced. With all this the cost is well

within the scope of any type of contract. Very well worth knowing. It must be easier to handle too. It's the most practical of all plasters. It's exceptionally strong and resistant to cracking with a high thermal insulation value. Do architects approve the use of Perlited Carlite ? Approve it ? They insist on it - Perlited Carlite is pre-mixed and carefully tested at the factory. It never varies in standard.

**CARLITE** *perlited*  
*pre-mixed plaster*



For full details of Carlite please write to :—The Gotham Company Ltd., Gotham, Nottingham  
The Carlisle Plaster & Cement Co, Cocklakes, Carlisle



This recessed lighting scheme of the canteen in the American Embassy was designed by Philips

## For Imaginative Lighting

*Talk to* **PHILIPS**

Some of the more imaginative lighting schemes of recent years have been the result of close co-operation between architects, electrical contractors, and the Philips Lighting Design Service.

The advice and assistance provided by this Philips Service is entirely free, and experienced lighting engineers in each Philips branch area are at your service. In addition, a fully qualified architect with special experience of lighting in its relation to architecture and colour is available to co-operate with you.

Visit Philips Lighting Stand No. F 124 at the Building Exhibition, Olympia, November 16—30. Full details of Philips Lighting Design Service will be obtainable.

**Philips will be happy to design for you—there is no charge**



# PHILIPS ELECTRICAL LTD

LIGHTING DIVISION · CENTURY HOUSE · SHAFTESBURY AVENUE · LONDON W.C.1

Tungsten, fluorescent, blended and discharge lamps & lighting equipment · Radio & Television Receivers · "Photoflux" flashbulbs, etc.

# CURRENT MARKET PRICES (LONDON)

(These prices apply to material purchased in the quantities named or otherwise as might be expected for a new building of moderate size).

September, 1955

## AGGREGATES AND SAND

1½ inch—all in—ballast	23/-	Yard cube
1 inch do. do.	24/-	delivered
inch screened shingle	21/-	(in five yard
inch do. do.	22 9	loads or
inch granite chippings	45/-	more)
Sharp washed sand	23 2	
Pit sand	22 3	
Building sand	22/-	
Broken brick	18 6	
1½ inch shingle	22/-	
Cartage of muck	8/-	

## BUILDING MATERIALS AS DESCRIBED, CENTRAL LONDON

CEMENTS packed in paper bags	Per ton
Portland in 6 ton lots	101/6
Do., from 1 ton to 5 tons 19 cwt do.	113/6
Do., Rapid hardening (6 ton lots)	112/-
Do. (but 1 ton to 5 ton 19 cwt)	124/-
Cement "Aquadcrete" (do.)	146/-
Do., "417" or "Polar" (do.)	146/-
Do., "White" 1 ton (lots)	262/-

LIME—	132/- (1 ton loads) deliv'd
Hydrated including	129 6 (2 3 do.) do.
and paper bags	119 6 (4 5 do.) do.
Ground	117 6 (6 do.) do.

## PLASTER—

Keenes, coarse, pink (2 ton lots)	198 9 ton
Do. do. white (do.)	204 3 do.
Sirapite, do. (2 ton to 3 ton 19 cwt lots)	147 3 do.
Do. finish (do.)	155 3 do.
Hardwall, do. (do.)	158 9 do.
Plaster, coarse, pink (do.)	145—do.
Do. do. white (do.)	153 3 do.
1in Plaster baseboard (25 to 75 yards)	3—Yard Sup.
1in Do. (150 to 299 yards)	2 8 do.
3in Jute scrim (100 yd. roll)	8—each
Cow hair (under 3 cwt)	97 6 cwt.

## FIRECLAY—

Stourbridge, loose (1 ton lots)	168 9 ton delivered
Fire cement	12/3 14 lb.

## BRICKS

BACKING BRICKS (in truck loads)	per 1,000 delivered
Flettons	113/-
Do. Keyed	115/-
Do. bullnose	133/-
Blue wirecuts	510 6
White	192—
Southwater engineering (No. 1)	379—
Firebricks—2½ in	72 6 per
Do. —3 in	89 6 do.

## STOCK BRICKS—

Mild stocks	181 6 per	1,000 at Works
Second, do.	216—	do.
First, do.	237—	do.

Add for delivery—approx. 45/- per 1,000 in lorry loads.

## FACINGS (ex truck or lorry)—

Rustics	138/- per	1,000 delivered
White	200—	do.
Blue pressed, 2½ in	562—	do.
Do. bullnose	576—	do.
Reds (Multi sand faced)	310—	do.
White glazed stretchers	1504—	do.
Do. headers	1480 6	do.
Do. bullnose	1880—	do.
Do. double stretchers	1997 6	do.
Do. double headers	1821 3	do.
Breeze fixing bricks	29/- per 100	
Fire tiles and lumps	33—foot cube	
Wall ties—8" x 2" x ½", black	63/- per cwt.	
Cement mortar (1 : 3) hand-made	92/- yard cube	

## BRICKLAYERS' SUNDRIES—

AIR BRICKS	9 x 3in	9 x 6in	9 x 9in	12 x 9in
Iron	2 1	3 4	5—	6 8
Galvanized do.	3 6	5 10	8 8	11 7
Terra Cotta do.	1 3	2 7	5 6	10 10
Chimney pots, Terra	1ft	2ft	3ft	4ft
Chimney pots, Terra (11 to 25)	7 3	12 8	28 9	49 9

## PARTITIONS—

18in x 9in Blocks keyed for plastering.	2in	2½in	3in
Per yard super in 6 ton lots	3/5	3/10	4/5
In solid clinker including any half blocks	4/3	4/11	5/9
In cellular clinker blocks	4/4	4/7	5/4

Clinker blocks in small quantity	5 7	6 7	7 11
Intermediate quantities in all types may be had at intermediate prices.			
Smooth in lieu of keyed faces extra cost per side 3d. per yd. super			

## SINKS—

Fireclay white glazed in and out—standard quality	24 x 18in	30 x 18in	30 x 20in
London pattern, no overflow,	72 6	90 9	96/-
6in deep	84 3	143 9	192 9

## FLUE LININGS, PLAIN, CIRCULAR—

	Foot lineal	Each
9in diameter	3/11	11/9
10in do.	4/11	14/9
12in do.	9/5	28/3
9in diameter, beaded end, 12in high		5/4

## FLUE PIPES AND FITTINGS—

	4in	5in	6in
Heavy asbestos type, 6ft length	15 3	21—	26 6
Do. 3ft. length	7 8	10/6	13 3
Do. bends	5 9	7 3	8 8
Light asbestos type, 6ft length	12 6	15 9	21—
Do. 3ft length	6 3	7 11	10 6
Bends	4 7	5 9	6 11
Baffle	12 5	14 9	15 8

## DRAINAGE GOODS

### GLAZED STONEWARE STANDARD LIST

	4in	6in	9in
ORDINARY TYPE—EACH			
Pipes in 2 feet lengths	1/8	2/6	4/6
Bends	2/6	3/9	10/11
Junctions (4in on 4in, 6in on 6in, 9in on 9in)	4/2	6/3	13/6
Gullies with 4in outlets	6 3	6 10½	11 3
4in horizontal inlets	2—	3—	5—
4in vertical ditto	3/—	4/—	7/—
Black iron grids	9d	1 5	2 9

### Adjustment to Current Cost

2 ton lots	Less than 2 ton lots
or more	100 pieces or more

"Best" pipes and fittings. Percentages to add

Further percentages to be independently added in respect of: British Standard pipes, etc., 10, "Best" Tested pipes, 37½, British Standard Tested, 47½.

## IRON DRAINAGE GOODS—

Each	4in	6in
Cast iron pipes, 9 feet long	71 3	105/-
Do. 6 feet do.	51 2	79 10
Do. 4 feet do.	39 8	62/-
Do. 2 feet do.	24 3	36 10
Short bend	17—	44 4
Junction	29 7	61 10

## CURRENT MARKET

## PRICES (Continued)

DRAINAGE GOODS—Continued					
GULLEY PARTS—	4in	6in			
Traps, high level, invert	29/7	80/1	each		
Inlet, bellmouth pattern	15/8	31/2	do.		
Do. with one vertical branch	27/2	50/9	do.		
Do. with two do.	73/8	107/2	do.		
Extra for Sealed cover	9/6	12/3	do.		

RAINWATER SHOES					
With vertical inlet and rebated top	39/3	78/2	each		
Extension piece, 6in high	20/5	20/5	do.		
Flat loose coated grating	4/-	4/-	do.		
Loose solid coated cover	5/5	5/5	do.		

MANHOLE CHANNELS, WHITE GLAZED—					
Each	4in	6in	9in		
Straight, 2 feet long	16/6	23/6	40/-		
Taper, ditto	27/6	27/6	41/3		
Bends, main, half section	31/9	45/6	74/6		
Ditto, branch, ditto	19/3	27/6	—		
Ditto, ditto, three quarters, ditto	27/6	42/9	—		
Junctions, single	26/3	45/6	—		
Ditto, double	35/9	62/-	—		

BROWN GLAZED CHANNELS—					
Based on standard list (less than 100 pieces)					
Half-round main channel (2ft long)	2/9	4/2	7/4		
Extra for stop ends	2/9	4/2	7/4		
Extra for outlets	5/5	8/2	—		
Channel bends with splayed ends	8/2	12/3	—		
Three-quarter section do.	10/10	16/4	—		

MANHOLE COVERS—					
			Black		
24 x 18in Light foot traffic	...	...	28/6 each		
Do. Strong do.	...	...	37/3 do.		
Do. Light car traffic	...	...	105/- do.		
Do. Road traffic	...	...	160/- do.		

SUNDRIES—					
Manhole steps	8/2	each			
4in Mic valve fresh air inlets (L.C.C.)	28/-	do.			
Plumber's hemp	7/3	per lb.			
Gaskin, caulking	1/5	do.			
Canvas backed hair felt, 4in wide	9d.	per ft. run			

WELSH SLATES (delivered)—					
Quantity					
Full	100 to	1 to			
Loads	499	99			
Sizes in inches	per 1,000	per 100	per doz.		
22 x 11	1920/-	262/-	34/6		
20 x 10	1700/-	230/-	30/3		
18 x 10	1240/-	163/-	21/6		
16 x 10	1020/-	132/2	17/6		
14 x 9	780/-	90/9	12/-		
14 x 4½	347/-	40/3	5/3		

TILES (Broseley and Staffordshire)—					
per 1,000	per 100	per 100			
10½" x 6½" Machine made	317/-	39/-			
Do. hand made, sand faced	385/-	46/6			
Hips, valleys and angles	31/-	per dozen			
Plain concrete tiles	177/-	19/6			

Sheeting asbestos corrugated, 6in pitch					
4½" x 16 gauge, drive screws (galvanized)	17/-	gross			
7½" x ½" hook bolts and nuts (do.)	51/6	do.			
Washers, round, flat galvanized	4/9	do.			
Do. do. bituminous	2/-	do.			

ROOFING FELT—					
Sanded bitumen felt (55lb)	1/-	Yard Super			
Ditto, but 75lb in weight	1/6	do.			
Inodorous felt, best quality	3/-	do.			
Ditto, second quality	2/4	do.			
Underlining	1/8	do.			
Sheathing	1/8	do.			
Galvanized felting nails	2/-	lb.			

## PRECAST CONCRETE LINTOLS—

1 : 2 : 4—½ in material, finished with fair exposed faces, including all form-work, and one ½ in diameter mild steel rod reinforcement to each 4½ in in width.

Per foot lineal delivered to site

4½ x 6in	9in x 6in	9in x 9in	13½in x 9in	18in x 9in
4/-	6/-	7/8	9/6	11/6

## STONE

PER FOOT CUBE in random blocks not exceeding 20ft cube in each, free on rail London.

Monks Park 8/-.

St. Aldhelm 9/-.

Portland brown Whitbed 8½/-

Other stone but delivered to sites. Doultong 8/9, Beer 8/3

## TIMBER

Softwood—sawn—random lengths.

	Per Standard	Per cubic foot
Carcassing quality	£105	12/8
Joinery quality	£120 and up	13/4
Plain edged unsorted flooring, per square	90/-	110/-
	138/-	165/-

½ in insulating wall board (600 yards) 4/4 yard super.

Larger quantities cost less, and smaller quantities more.

## SUNDRIES—

	Dia.	3in	6in	9in
Black hexagon bolts, nuts and washers. Each	½ in	7d	10d	1/—
	½ in	11d	1/2	1/6
	½ in	1/3	1/7	1/11
Sashine, hemp, good quality	No. 6	No. 8	No. 10	
Per Yard Run	9d	1/1	1/4	
Floor brads	...	...	68/-	per cwt
Cut Clasp Nails	...	...	69/-	per cwt
Steel ordinary screws	1" No. 8	2/10	2" No. 8 4/10	per
Brass, ditto	Do. 8/8	Do.	15/2	gross

## HARDWOOD—

	Per ft	super	Per
Prime	½ in	1 in	ft cube
African mahogany	2/4	2/6	28/-
Honduras ditto	3/3	4/—	50/-
Portuguese Guinea ditto	3/1	3/3	36/-
African walnut	2/5	2/7	29/-
Australian ditto	5/6	5/10	65/-
English oak	4/3	4/6	50/-
Yugoslavian ditto	3/4	3/7	40/-
Burma and Siam Teak	5/-	5/9	65/-

## DOORS.—STANDARD TYPE SOFTWOOD

Each in quantities 12 or more.

1½ in finish, 4 horizontal panels moulded both sides 6ft 6in high.

2' 3" wide 41/-

2' 6" do. 42/3

2' 9" do. 44/6

FLUSH DOORS, 1½ in thick, ply faced both sides, lipped edge.	2in (nominal) as last but upper panel prepared for glazing
2' 6" wide 59/-	2' 6" wide 59/-
2' 9" do. 62/-	2' 9" do. 62/-
2in (ditto) all as above but in 3 panels.	2in (ditto) all as above but in 3 panels.
2' 6" wide 55/9	2' 6" wide 55/9
2' 9" do. 58/3	2' 9" do. 58/3
2in (ditto) all as above but in 2 panels.	2in (ditto) all as above but in 2 panels.
2' 6" wide 51/3	2' 6" wide 51/3
2' 9" do. 53/6	2' 9" do. 53/6

## IRONMONGERY

	2in	3in	4in	5in	6in
Cast iron Butts, per pair	1/1	1/9	2/9	5/1	7/3
Hinges, spring, single action regulating, japanned, each	—	8/-	10/3	13/9	18/3
Do. but double action spring only, each	—	14/3	18/3	23/3	29/3
Do. blank only, each	—	8/9	12/-	17/9	21/6



**These windows are  
cutting heat losses in half**

For factories where it is necessary to control interior temperatures exactly and also have plenty of daylight, it is common sense to specify double glazing.

Heat transmission through double glazing is only 20% greater than through a solid Fletton brick wall, whereas with single glazing nearly 2½ times as much heat is transmitted.

Double glazing also helps to eliminate down draughts, so creating a healthy working atmosphere. For factory, home, shop or office, where heat conservation is desirable, two glasses are always better than one . . . especially if they are working together.

For wide windows and warmth . . .

## DOUBLE-GLAZING

P I L K I N G T O N   B R O T H E R S   L I M I T E D



For further information on the use of Glass in building, consult the Technical Sales and Service Department, St. Helens, Lancs. (Telephone, St. Helens 4001), or Selwyn House, Cleveland Row, St. James's, London, S.W.1. (Telephone: Whitehall 5672-6). Supplies are available through the usual trade channels.

DG 16





## CURRENT MARKET

IRONMONGERY—Continued						
	12in	18in	24in	30in	36in	
Tee hinges (japanned), per pair	2/-	3/10	—	—	—	
Do. but stronger, per pair	3/4	6/1	8/3	—	—	
Hook and Ride hinges, per pair	—	—	13/4	16/3	24/10	
BOLTS—each	3in	4in	6in	8in	10in	12in
Cabinet, barrel, straight or necked	1/4	1/7	2/1	—	—	—
Square spring, with brass knob	1/4	1/7	2/1	—	—	—
Tower bolts	—	1/7	2/3	3/—	3/9	4/6
Barrel bolts	—	2/7	3/9	4/10	6/3	7/7
Add to Tower or Barrel bolts if necked	—	—	1d	1d	1d	1d

LOCKS—each—						
Rim lock, 2 lever, wrot case	Brass furniture	...	3/-			
brass bolt and bushing	12/-	or Bakelite do.	3/1			
Mortice lock, 2 lever, bushed	Brass furniture	...	7/-			
...	or Bakelite do.	3/8				
Cylinder latches, japanned case	...	...	15/3			
Brass sash fastener	...	each	4/-			
Casement fasteners (malleable)	...	do.	1/6			
Do. stays (do.)	...	do.	2/-			
Axle pulleys (brass face, iron wheel)	...	do.	4/7			
Do. as last, but with brass wheel, 1½in.	...	do.	5/9			
Sash line, No. 8 Anchor yellow label	per yard	1/-				

## METAL GOODS

British rolled steel joists ex mills to basis sections on site (6in x 5in, 8in x 5in or 6in, and 10in or 12in x 6in) .....	£34 0 0	per ton
Extra cost over basis for following sections—		
9in or 18in x 7in, 14in x 5½in, 15in x 5in, 14in or 15in or 16in or 18in x 6in, 20in x 6½in, 20in x 7½in, 10in or 12in or 14in or 18in x 8in .....	10/-	per ton
5in x 4½in, 7in x 3½in, 13 x 5in .....	15/-	do.
12in x 5in, 22in x 7in .....	20/-	do.
6in x 4½in, 7in or 8in or 9in x 4in, 10in x 5in .....	25/-	do.
4in x 3in, 10in x 4½in .....	30/-	do.
5in x 2½in, 5in x 3in .....	35/-	do.
6in x 3in, 24in x 7in .....	40/-	do.
3in x 3in .....	50/-	do.
4½in x 1½in .....	65/-	do.
3in x 1½in, 4in x 1½in .....	70/-	do.
½in mild steel reinforcing rods ex mill d.d.	£35 0 0	do.

Extras per ton						
½in and ¾in diameter in size .....	32/-	per ton				
½in do. do. .....	32/-	do.				
¾in do. do. .....	49/6	do.				
¾in do. do. .....	67/-	do.				
¾in do. do. .....	87/-	do.				
¾in do. do. .....	124/6	do.				
Extras for length						
5ft to 30ft .....	7/6	do.				
3ft to 2ft .....	15/-	do.				
2ft .....	22/6	do.				
40ft to 45ft .....	15/-	do.				
45ft to 50ft .....	22/5	do.				
Bolts and Nuts .....	90/-	per cwt				
Trench covering, including trays 1½in deep and rebated frames, 9in wide .....	20/6	foot run				
Do. but 12in wide .....	22/-	do.				
Do. but 14in wide .....	24/-	do.				
Do. but 18in wide .....	31/6	do.				

## METAL SUNDRIES

Cast iron pavement light filled with 4in x 3in glass lenses .....	32/-	per ft super
½in wrought iron plate door in four panels with stiles and rails on both sides .....	50/-	do.
20 gauge galvanized iron trunking and straps .....	5/6	do.
24 gauge galvanized Tallboy 6ft high 9in diameter with 9in x 12in base .....	57/6	each

CHAIN LINK FENCING—						
In 25 yards lineal rolls inclusive of line wire, 2in mesh	36	42	48	60	72	
10½ wire gauge .....	98/-	114/3	130/9	163/1	195/9	
12½ do. .....	69/-	80/6	92/-	114/9	137/9	
14½ do. .....	49/3	57/6	65/9	82/-	98/6	

## PRICES (Continued)

## DOUBLE SOOT DOORS AND FRAMES—

Fitted with brass turnbuckle and cast key .....	19/-	28/-	48/6
---	------	------	------

## SLIDING DOORS, GATES AND PARTITIONS—

Factory sliding doors in two leaves containing about 100 square feet with mild steel angle frames covered with 24 gauge corrugated galvanized sheeting and including hanging tubular track and gear complete .....	15/6	foot super
Factory entrance gates with mild steel frames clad with 2in mesh chain link complete .....	12/-	do.
Steel partitioning, glazed (rough cast) and stove enamelled .....	18/6	do.

## STEEL ROOF LIGHTS—

Lanterns with vertical sides, and hipped roof, glazed with ½in cast glass and lead flashed .....	14/—	foot super
Skylights of similar construction (27ft super) .....	20/—	do.

## HIGH GRADE DOMESTIC BOILERS

Coke Fed. Performance 20 to 40 gallons raised from 40°F to 140°F per hour as under.

TYPE	20 gallons per hour	Plain	cast	iron	black	£	s	d
	15in wide, 23in high	finish	...	...	...	7	3	3
		Ditto, in cream mottle	finish	including	side			
		jackets	...	...	...	10	3	6
	25 gallons per hour	In cast iron as before and	base	plate	...	10	13	6
	19in wide, 22in high	Ditto in cream mottle with	side	jackets and base	..	15	13	9
		In cast iron, etc., as last	ditto	ditto	..	16	18	6
		Ditto in cream mottle all	as last	ditto	..	22	18	0

## GAS, WATER AND STEAM TUBES

(From Standard List)

Internal	1in &	Diameter—	1in	1in	1in	1in	1in	2in
Tubes per ft	4d	4½d	5½d	6d	9½d	11d	1½d	14½
Bends each	8d	9d	11d	12	17½	27½	3½	5½
Elbows, sq. do.	10d	11d	11d	11	13	16	2	4
Do., round do.	11d	11d	11d	1	2	5	2	4
Tees .. do.	1/—	1/—	1/—	1/	1/	1/	1/	1/
Crosses .. do.	2/2	2/4	2/9	3/3	4/1	5/6	6/7	10/6
Backnuts .. do.	2d	2d	3d	3d	5d	6d	8d	11/1
Sockets .. do.	3d	3d	4d	5d	6d	8d	10½d	1/3
Sockets, dimin.	do.	4d	5d	6d	7d	9d	1/—	1/4

## PERCENTAGES ON OR OFF ABOVE

In quantity and in random lengths.

## TUBE—

Class A (light)	—10½%	Black	+9½%	Galvanized
Class B (medium)	—11½%	Do.	+19½%	Do.
Class C (heavy)	+12½%	Do.	+37½%	Do.

## FITTINGS—

Lightweight .....	+23%	Black	+37½%	Galvanized
Heavy .....	+31%	Black	+47½%	Do.

## RAINFOWATER GOODS (Painted or Unpainted)

In consignments of 5 cwt. and over.

## From Standard List.

Pipe:	2in	3in	4in	5in	6in
6ft. lengths .....	each	12/10	14/5	18/11	24/8
3ft. do. .....	do.	7/—	7/9	10/—	13/1
Shoe, ordinary .....	do.	2/7	3/10	5/7	9/5
Bend .....	do.	3/1	4/4	6/3	11/3
Branch, single .....	do.	4/6	6/7	9/3	14/7
Offset, 4½in .....	do.	3/9	5/3	7/9	12/11
Do. 9in .....	do.	4/11	6/6	9/8	15/3
H.R. gutter, 6ft length .....	do.	—	6/—	8/5	10/4
Angle or nozzle .....	do.	—	2/6	3/1	3/9
Stop end .....	do.	—	9d	1/1	1/6
				Above plus	7½%

## CURRENT MARKET

## PLASTERING MATERIALS

Sand, lime, cement and various plasters are previously included under those heads—

Metal lathing (1" x 24G) (20 yards)	3/8½ sq. yard
Plaster baseboard 1" (300 to 599 yards)	2/6 do.
Lath nails, galvanized	1/2 lb.
White glazed tiles (6" x 6" x 1")	18 6 sq. yard
Do. rounded on one edge	22/6 do.
Do. on two adjoining edges	27/- do.

## PLUMBER'S GOODS

4 lb. lead sheet (in 1-ton lots)	143/3 per cwt
Lead water pipe in coils (do.)	144/6 do.
Plumber's solder	3 7 lb.
Copper tacks	6/9 do.

## IRON SOIL AND WASTE PIPE. (5cwt lots and up)

each	2in	3in	3½in	4in
1/2in Medium pipe, 6 ft length	14/6	17/2	19/3	21/11
Ditto, 4ft length	10/5	12/2	13/7	15/5
Bends	5/4	6/6	8/1	9/1
Ditto, with oval door	17/4	18/6	21/1	24/7
Junction, single	6/6	9/8	11/3	13/3
Ditto, with oval door	18/6	21/8	24/3	26/3
Swan necks, 4½in	6/6	10/3	11/9	13/9
Ditto, 9in	8/8	11/9	13/9	16/1
Holderbat, 2½in projection	4/11	5/1	5/4	5/6
				Above plus 7½

## GALVANIZED CISTERNS, TANKS AND CYLINDERS—

(Less than four) each	gallons
CISTERNS—	

Bends over tops and corner plates. Riveted or welded	Nominal capacity
	100
14 gauge	180/-
12 gauge	208/-
½in. plate	246/-
	150
	200
	300
	124/-
½in. plate	137/3
	137/-
	151/-
	163/-
	199/3

## HOT WATER TANKS—

20	25	30	40
Riveted and with handhole and ring.			
12 gauge	124/-	137/-	150/-
½in. plate	137/3	151/-	163/-
			180/-
			204/-
			226/6

## PLUMBER'S BRASSWORK, etc.

	1½in	2in	3in	3½in
Boiler screws, single nut	1/7	2/1	3/5	5/1
Ditto, double nut	2/2	2/10	4/8	6/10
Cap and lining	1/2	1/7	2/-	2/3
Plumber's unions	2/7	3/2	4/6	8/-
Ball valves, screwed iron	16/-	23/-	—	—
Ditto, fly nut and union	17/-	24/6	—	—
Bib valves, crutch top				
screwed iron	10/-	14/3	—	—
Ditto, but screwed boss	11/2	16/-	—	—
Stop valves, screwed iron	8/-	12/3	—	—
Ditto, screwed iron and union	10/3	15/6	25/9	—
Ditto, double union	11/1	16/3	27/6	—
Waste, plug chain and stay	—	—	8/-	9/-
	1½in	1½in	2in	4in
Caps and screws	3/1	3/10	5/6	—
Sleeves, long	—	—	7/5	12/6
Ditto, short	—	—	3/8	10/6
Thimble	—	—	4/-	10/7
Full way gate valves, hot pressed	21/6	30/-	—	—
		1½in	1½in	2in
Lead 7 lb P. trap	6/11	9/1	12/10	—
Ditto, S. trap	8/7	11/3	15/9	—
Lead 6 lb P. traps with 3 in seal	7/9	9/4	—	—
Ditto, but S. traps, ditto	9/7	11/9	—	—
Wire balloon guards, copper, 2in 3/16"; 4in 3/3.				
Ditto, galvanized iron, 2in 1/10"; 4in 2/1.				
Hair felt, 34in x 20in, 24 oz, 6/- sheet.				
Boss white jointing compound, 2/- lb.				
Gaskin, 1/5½ lb. Hemp, 7/3 lb.				

## PRICES (Continued)

## COPPER TUBES—Extract from B.S. 659/1944—

Nominal bore	Outside diameter	Gauge	Internal work (semi-hard).		3 cwt. lots
			inch	lb per ft	
½in	0.596	19	0.27	58½	15.87
¾in	0.846	19	0.39	57½	22.28
1in	1.112	18	0.62	55½	34.49
1½in	1.362	18	0.76	55	41.80
2in	1.612	18	0.91	55	50.05
2½in	2.128	17	1.40	56½	79.28

## CAPILLARY TYPE CONNECTIONS—

Each	½in	¾in	1in	1½in	2in
Straight	1/9	2/5½	3/10½	5/4	6/10
Bends	4/7	5/7½	8/1	11/0	17/4
Tees	4/2½	4/11	7/10½	11/7	16/5½
Brackets (Brass)	1/11	2/1½	2/5½	—	—

## GLASS

English, flat drawn sheet glass cut to sizes in squares	Per foot superficial
	24oz 26oz 32oz
	7½d. 10d. 1½
Figured rolled and cathedral, white, cut to sizes, in squares	9d. Per foot superficial
Ditto, but in standard tints	1/4d. do.
½in Rolled, cut to size, in squares	9d. do.
½in or ¾in in rough cast ditto	1/- do.
½in ditto wired ditto	1/2 do.
Georgian wired ditto	1/21 do.
Fluted (No. 4) ditto	1/3 do.
Reeded (narrow, broad, cross and major) ditto	1/1 do.
Reedly (narrow and broad) ditto	1/1 do.
Spotlite ditto	1/1 do.
½in. Calorex Cast ditto	1/2½ do.
Calorex Sheet (15oz.)	6/6 do.
ditto (21 oz.)	9/- do.
Flashed Opal (15/18oz.)	3/10 do.
Pot Opal (15/18oz.)	3/9 do.

## POLISHED PLATE GLASS (Tariff) Cut to sizes.

Ordinary substance ½in and 1½in thick.

Per Superficial foot.

## General Glazing

In plates not exceeding :			
2ft super in each	...	...	3/7
5ft ditto	...	...	4/5
45ft ditto (unless extra sizes)	...	...	5/1
100ft ditto (ditto)	...	...	5/6

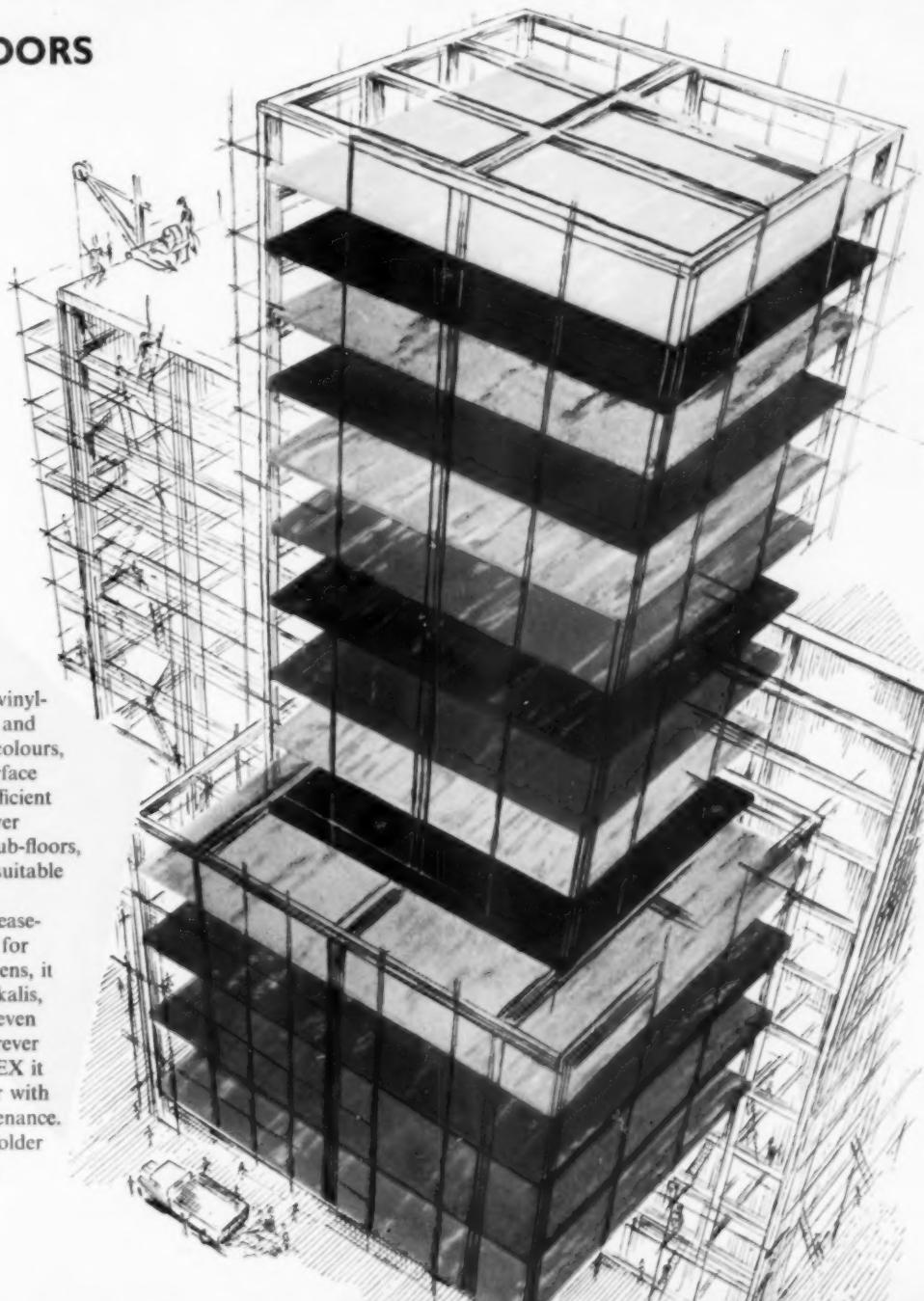
Extra sizes, i.e., Plates exceeding 100ft super or 96in high or 16in one way or 96in both ways at higher prices.

## DECORATING MATERIAL

	Price	Unit
Aluminium Paint	37/6	Gallon
Distemper, ceiling	35-	Cwt
Distemper, washable	120-	do.
Enamel	60/-	Gallon
Gold Metallic Paint	86/6	do.
Heat Resisting Paint	50/-	do.
Japan, black	23/6	do.
Knotting	40/-	do.
Linseed Oil	14/9	do.
Boiled, ditto	15/3	do.
Proprietary Paints (good class)—		
Finishing	47/-	do.
Priming	50/-	do.
Undercoat	53/-	do.
Paperhanger's Paste	34/6	Cwt
Petrifying liquid	8/9	Gallon
Putty	53/-	Cwt
Size	9/3	Firkin
Terebine	16/-	Gallon
Turpentine substitute	6/3	do.
Varnish, oak, copal inside use	33/-	do.
Ditto, ditto, outside use	38/-	do.
Ditto, white, eggshell, flat	44/6	do.
White lead mixed paint	62/-	do.
White lead	178/-	Cwt
Whiting	12/6	do.

# ACCOFLEX The new vinyl tile...

FOR FLOORS  
AT ALL  
LEVELS



ACCOFLEX is a vinyl-asbestos tile, clear and clean in all its 14 colours, with a lustrous surface beauty. It has sufficient flexibility to lay over suspended wood sub-floors, and is, of course, suitable for rigid floors.

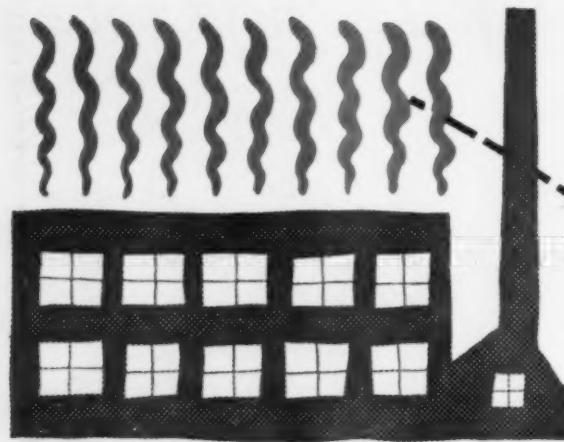
ACCOFLEX is grease-resisting and ideal for kitchens and canteens, it is unaffected by alkalis, soaps, paraffin or even dilute acids. Wherever you lay ACCOFLEX it will give hard wear with only normal maintenance. For a descriptive folder please write to the address below.

**Armstrong**  
CORK COMPANY LTD.

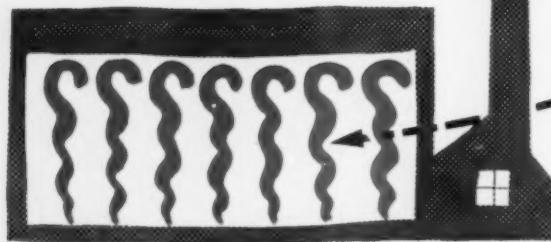
**ACCOFLEX**  
VINYL ASBESTOS TILES

ARMSTRONG CORK COMPANY LTD., Flooring Department: Bush House, Aldwych, London, W.C.2.

Tel: COVENT Garden 1101



Insulation against heat loss is vital...



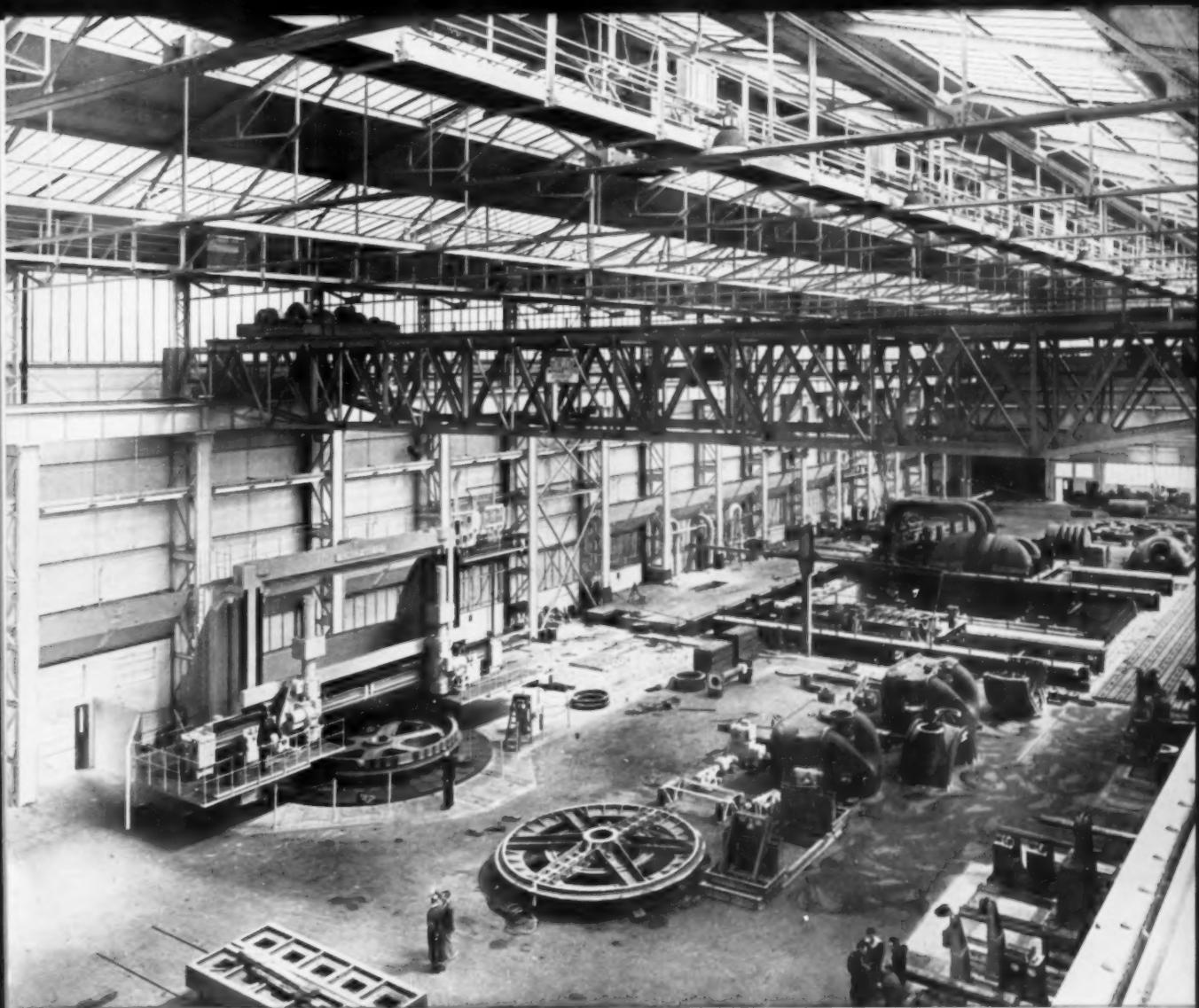
Vital to the National economy,  
and vital to your client—  
it can halve his fuel bill.

A thermally insulated lining applied to the roof of an industrial building can reduce the annual fuel consumption by up to 6 tons for every 1,000 sq. ft. of structure.

'Paramount' Insulating Gypsum Plaster Board provides the highest degree of thermal insulation at competitive cost and gives maximum fire protection as a welcome bonus.

Your client will be interested in our brochure on this subject or we invite you to consult our Technical Advisory Service immediately.

**THE BRITISH PLASTER BOARD (MANUFACTURING) LIMITED**  
BATH HOUSE, 82 PICCADILLY, LONDON, W.1. Tel: GROsvenor 1050



Photograph by kind permission of The General Electric Co. Ltd.

## WORLD'S LARGEST TURBINE SHOP

This heavy turbine shop, 364 feet long, 131 feet wide and 82 feet high, has recently been put into service at Fraser & Chalmers Engineering Works, Erith, of The General

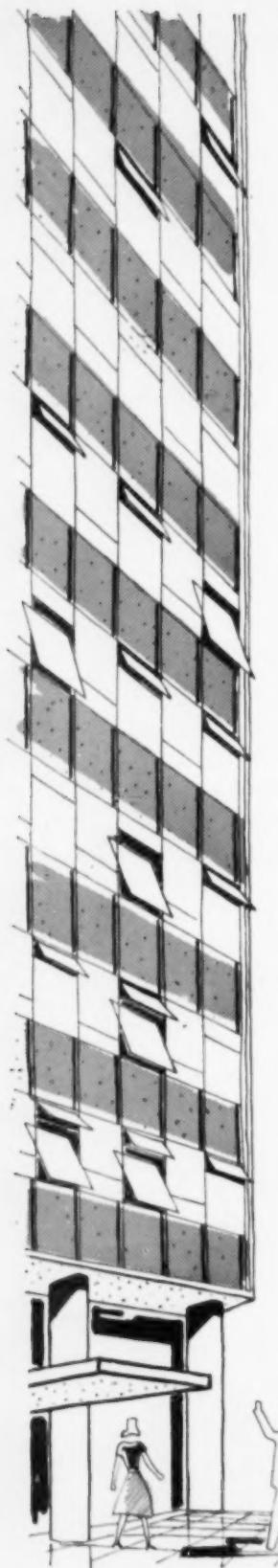
Electric Company Ltd. The structural steelwork of this massive building is under the protection of "Atlas Ruskilla" Paints including, of course, the new type Rust-Inhibiting Undercoats.

*Send now for Colour Card and particulars.*

Atlas Preservative Co. Ltd., Erith, Kent. Phone: Erith 2255 (3 lines), Erith 5721 (4 lines). Grams: Deoxydizer, Erith.

**ATLAS RUSKILLA**  
*The Paints of Stamina*

**IRON & STEEL  
PRESERVATIVE  
PAINTS**



# high...and dry

The Dry Construction method, with its many advantages, is now a practical proposition in multi-storeyed buildings. Hitherto the risk of rapid collapse in fire had prevented this extension of the method, but **ASBESTOLUX** *non-combustible* asbestos insulation board is setting things in motion once more and is, in fact, becoming the basis of a new technique. **ASBESTOLUX**, light, strong and inert, gives fire protection with minimum thickness and weight, assists in fulfilling safety regulations and bye-laws. Quickly erected and easily fixed, for curtain walling panels, ceilings, partitions and stanchion cladding, **ASBESTOLUX** is making the dream of Dry Construction come true.

## Dry construction needs

# ASBESTOLUX

*non-combustible*  
ASBESTOS INSULATION BOARD

THE CAPE ASBESTOS CO. LTD  
114-116 PARK STREET • LONDON • W1

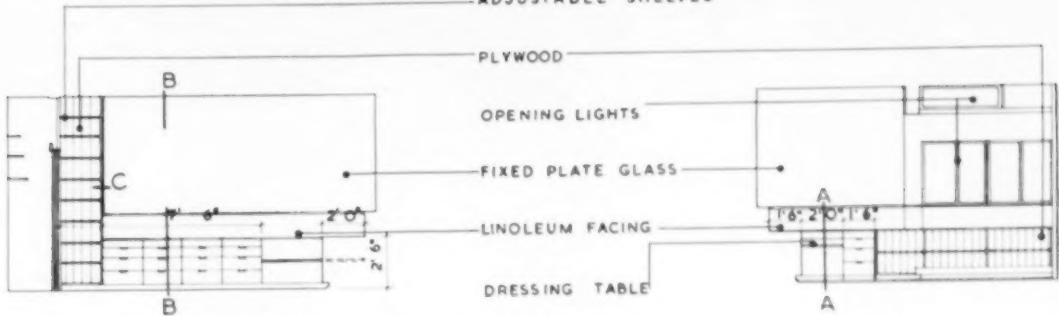
Telephone: GROsvenor 6022



and at: Blackfriars House • Parsonage • MANCHESTER 3 • Phone: Blackfriars 9355/6  
Eagle Buildings • 217 Bothwell Street • GLASGOW C2 • Phone: Central 2175  
216a Corporation Street • BIRMINGHAM 4 • Phone: Central 8168

TA6464

## ADJUSTABLE SHELVES



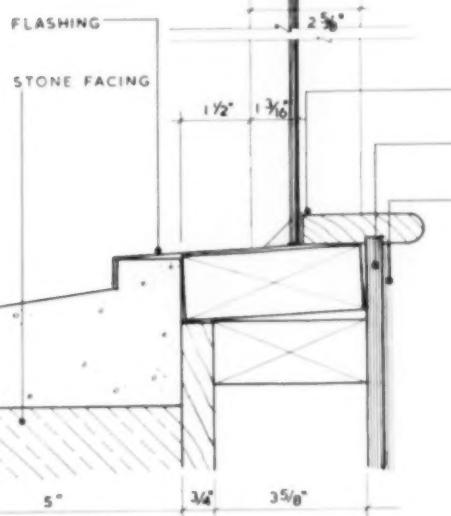
KEY ELEVATIONS OF BEDROOM WALLS • 1/8" TO 1' 0"

LID OF DRESSING TABLE FOLDS AGAINST WALL

20 G METAL LIGHT COVER  
CURTAIN TRACK HELD BY EXPANSION BOLTS

LIGHT

PUTTY



SECTION A-A

DOOR SWITCH SCREWED TO SOLID BLOCKING

PIANO HINGE

CONTINUOUS 1 1/2" X 1 1/2" ALUMINUM ANGLE

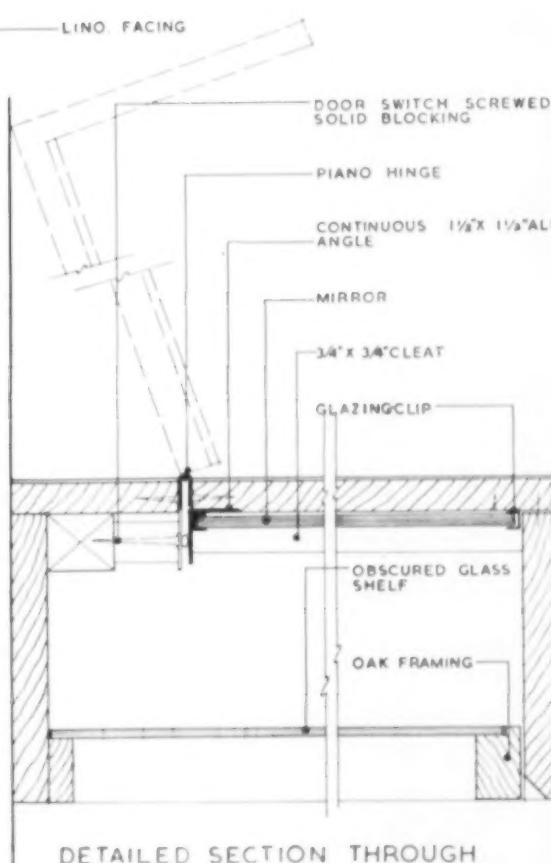
MIRROR

3/4" X 3/4" CLEAT

GLAZING CLIP

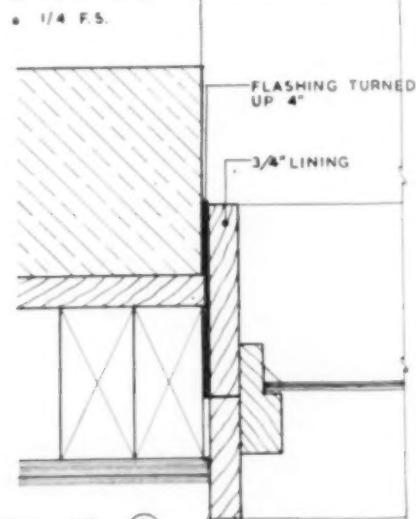
OBSCURED GLASS SHELF

OAK FRAMING



DETAILED SECTION THROUGH DRESSING TABLE • 1/4 F.S.

SECTION B-B



PLAN AT C

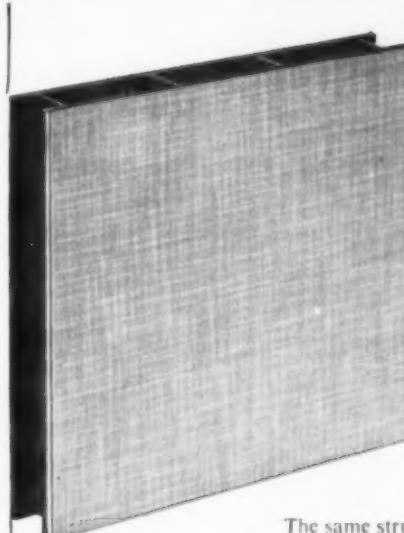


BEDROOM WINDOW AND FITTINGS; HOUSE AT MONTECITO, CALIF.  
ARCHITECT: R. J. NEUTRA

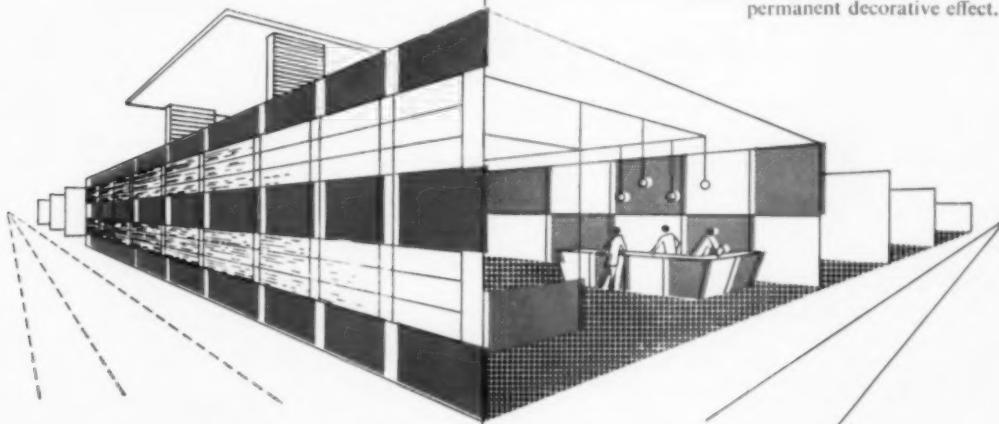
## THE 'DECORPLAST' CAVITIED STRUCTURAL PANEL

This first-class structural unit has all the advantages of the well-known 'Holoplast' cavitated panel plus the extremely decorative 'Decorplast' surface—incorporating a hard wearing melamine resin which is highly resistant to food, acids, fruit juices, fats, oils, boiling water etc.

Some of its many important uses are 'movable walls', partitions, furniture for shops, restaurants, bar and factory fittings, and for ships' bulkheads and cabin construction.



The same structural, thermal and acoustic functions as the standard 'Holoplast' panel—and in addition a permanent decorative effect.



### SIZES

Standard Overall Panel Thicknesses

1½" and 1"

Standard size of panel

8' 0" x 4' 0" wide

Max. size for use externally

4' 6" x 4' 0" wide

### PATTERNS

Textile, or Oriental on white backgrounds.

### COLOURS

Textile :- Green, Blue, Buff, Pink, Grey.

Oriental :- Green, Blue, Buff, Pink.

### FINISHES

Satin or Eggshell.



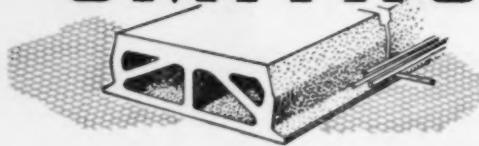
Manufactured by

**HOLOPLAST LTD** Sales Office: 116 Victoria St., London, S.W.1. Telephone: Victoria 9354/7 & 9981

HEAD OFFICE & WORKS: NEW HYTHE, NEAR MAIDSTONE, KENT.



# SMITH'S



*The most adaptable System of Suspended Hollow Concrete Floor and Roof Construction for large and small spans.*

Midland Associated Company & Licensees,  
**PARKFIELD CONCRETE PRODUCTS CO., LTD.**,  
St. Peter's Road,  
NETHERTON, nr. Dudley, Warks. Phone : Dudley 4315

**SMITH'S**

2 WAY REINFORCED FIREPROOF FLOORS

**SMITH'S FIREPROOF FLOORS LTD.**

IMBER COURT, EAST MOLESEY, SURREY

Telephone : EMBerbrook 3300

Telegrams : TRIANCO EAST MOLESEY



What do you seek  
in the perfect **TAP**?

Long trouble-free efficient service and a smooth even flow of water. Yes, of course. But to this add an attractive appearance which enhances and dignifies basin, bath or sink, and an all time guarantee.

All these features are embodied in

## SUPATAPS and SUPAMIXERS

PLUS — Washer changing without having to turn off the water at the main.

Replace your existing old fashioned tap with a wonderful

### SUPATAP

A typical Basin Pillar SUPATAP is illustrated below

**SUPATAPS**

LEADERS IN QUALITY, DESIGN AND INNOVATION

#### IMPORTANT DEVELOPMENT

Supatap patent Cushioned Nylon Washer has five times normal washer life. De Luxe Supataps are available with coloured earpieces in six shades. For illustrated leaflets and general information write to sole manufacturers.



SEE OUR EXHIBIT  
Stands No. 548 & 550.



### The SUPERMIX Basin Set

(illustrated above)  
embodies an efficient "pop-up" waste.

F. H. BOURNER & CO., ENGINEERS LTD.  
207-211, NEW BOND STREET, LONDON, W.1.  
TELEGRAMS: "BOURNER", TELEPHONE: MAYFAIR 6-1212.

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

## CONTRACT NEWS •

address it is the same as the locality given in the heading. (c) deposit, (d) last date of application, (e) last date and time for submission of tenders. Full details of contracts marked \* are given in the advertisement section.

### HIGH QUALITY WHITE FACING BRICKS

(S.P.W. BRAND)

As supplied to the WAR OFFICE, H.M. MINISTRY of WORKS, AIR MINISTRY. Etc.

Sample and Brochure sent on request

**M. McCARTHY & SONS, LTD.**  
BULWELL — NOTTINGHAM

**RINGMER BUILDING WORKS, LTD.**

BUILDERS & CONTRACTORS

Joinery Specialists

**RINGMER : LEWES : SUSSEX**

Telephone: Lewes 300

ESTABLISHED OVER 100 YEARS

**J. W. GRAY & SON LTD**  
1 PRINCETON STREET  
BEDFORD ROW, WC1  
**LONDON &**  
13 CASTLE STREET  
**SALISBURY**  
**CHURCH SPIRE RESTORERS**

CHA  
8701\*

SAL.  
2750

how much does  
our reputation  
cost you?

It doesn't. Many think you pay for a name. That may be true of some, but certainly not of us.

The experience we have gained in doing the same job well for 100 years enables us to quote low rates.

for built-up roofing  
it pays you



**ENGERT & ROLFE LTD**  
LONDON E14 EAST 1441  
& The Quay Exeter (Exeter 3595)

838

### OPEN BUILDING

**BINGLEY U.C.** (a) Erection of 24 and 12 flats in 1 block together with out-buildings, roads, drainage and services, for central area redevelopment. (b) Council's Surveyor, Town Hall. (c) 2gns. (e) Nov. 1.

**BLETCLEY U.C.** (a) Erection of (Job No. 1) 4 houses at Staple Hall, (Job No. 2) 36 garages at Walnut Drive, (Job No. 3) 16 Garages at Castles Estate, block no. 1, (Job No. 4) 14 garages at Castles Estate, block no. 2 (Job No. 5) 15 garages at Castles Estate, block no. 3 (Job No. 6) 6 garages at Castles Estate, block no. 4 (Job No. 7) 11 garages at Castles Estate, block no. 5, (Job No. 8) 15 garages at Castles Estate, block no. 6. (b) Council's Engineer, Council Offices. (e) Oct. 10.

**COLCHESTER B.C.** (a) Erection of 34 garages, Hedge Drive, Shrub End site. (b) Borough Engineer, 1, West Stockwell Street. (c) 2gns. (e) Oct. 10.

**CONGLETON B.C.** (a) Erection of 80 dwellings, Buglawton Estate. Contract No. 2. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Oct. 8.

**COWBRIDGE R.C.** (a) Erection of (1) 3 blocks of 2 houses, site works, drainage and cesspool at Colwinstone, (2) 5 blocks of 2 houses, drainage and cesspool at Llandow, (3) 1 block of 4 houses, 1 block of 4 houses, 3 blocks of 2 houses at Pantgwyn, and (4) 1 block of 2 houses and site works at St. Hilary. (b) Mr. W. R. Hawkins, 41, Eastgate Street. (c) 3gns. (e) Oct. 19.

**CREWE CORPORATION.** (a) Erection of 40 houses at Wistaston Green Estate. (b) Borough Surveyor, Municipal Buildings. (c) Oct. 3.

**DAGENHAM B.C.** (a) Erection of 3 blocks of 18 flats at Whitebarn Lane. (b) Borough Engineer, Civic Centre. (c) 2gns. (e) Oct. 15.

**DUDLEY CORPORATION.** (a) Erection of 8 cottages, Laurel Road. (b) Borough Architect, Priory Hall. (e) Oct. 10.

**DURHAM C.C.** (a) Erection of family group home at Middleton St. George. (b) County Architect, South Street. (e) Oct. 7.

**EAST SUFFOLK C.C.** (a) Erection of new secondary school at Saxmundham. Approx. cost £100,000-£120,000. (b) County Architect, County Hall, Ipswich. (d) Oct. 11. (e) Nov. 11.

**EIRE, DUBLIN.** (a) Erection of a new primary school, at The Long Mile, Walkinstown, for the Irish Sisters of Charity. (b) Messrs. Dermot, O'Reilly, Hyland and Co., 2, Upper Pembroke Street, Dublin. (c) £15. (e) Oct. 18.

**ESSEX C.C.** (a) Erection of additional accommodation at Chelmsford King Edward VI Grammar School. Approx. cost £7,350. (b) County Architect, County Hall, Chelmsford. (d) Oct. 8.

**GIPPING R.C.** (a) Erection of 14 houses at Stowupland. (b) Council's Engineer, Council Offices, Needham Market, near Ipswich. (c) £3. (e) Oct. 17.

**'PUDLO'**  
Registered Trade Mark  
BRAND

CEMENT WATERPROOFING POWDER

USED IN PORTLAND CEMENT CONCRETE AND RENDERINGS TO EXCLUDE OR RETAIN WATER

WRITE FOR DIRECTIONS BOOK

To —

**KERNER-GREENWOOD & CO., LTD.**  
KING'S LYNN

Sale Proprietors and Manufacturers.

THE MOST RELIABLE FIRE CEMENT IS 'FEUSOL'—have you tried it?

Specify  
**CERRUX**  
DECORATIVE PAINTS  
CELLOL LTD., KINGSTON-ON-THAMES

**S. SOUNDPROOF CONSTRUCTION C**  
LONDON N.W.2  
ANECHOIC CHAMBERS  
SOUND DEADENING &  
ABSORPTION EXPERTS  
WILLESDEN 7187

**FIBRE  
INSULATION BOARD**

"QUITFIRE" impregnated is FIREPROOFED (Class 1 to B.S.476/32 Amdt No. 2) and FUNGUS-proofed or TERMITE-proofed (or all three combined.)

Used on Government contracts, Industrial Buildings, Schools, etc. Enquire of your supplier or processors :

**S. O. Rudkin & Co. Ltd.**  
Plantation House, Mincing Lane, LONDON, EC.3.  
Tel: MANSion House 4406 (3 lines)

**GLoucestershire C.C.** (a) Erection of magistrates' court, police station, 2 police houses, garages and health clinic, at Dursley. (b) County Architect, Shire Hall, Gloucester. (d) Oct. 1.

**GRANTHAM B.C.** (a) Erection of 8 houses and 1 block of 6 flats. (b) Borough Surveyor, Guildhall. (c) 2gns. (e) Oct. 17.

**ILFORD B.C.** (a) Erection of 25 garages, Wanstead Park Road. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Oct. 25.

**ISLE OF MAN WATER BOARD.** (a) Erection of a pumphouse at Corry Bridge, Maughall. (b) Mr. J. Phillips Lomas, Martins Bank Chambers, Victoria Street, Douglas. (c) 2gns. (e) Oct. 17.

**KIDDERMINSTER B.C.** (a) Erection of 6 shops and flats in 2 separate blocks at Comberton Estate. (b) Borough Engineer, 110, Mill Street. (c) 2gns. (e) Oct. 17.

**LANCASHIRE C.C.** (a) Alterations, extensions and repairs to form hostel for aged persons at Fleetwood "Cumberland Hotel" and extensions and adaptations to form hostel for aged persons at Wilsshire "Warren Holt." (b) County Architect, P.O. Box No. 26, County Hall, Preston; quoting ref. A/MG. (c) £2 each job. (d) Oct. 4.

**LONDON—HAMPSTEAD B.C.** (a) Erection of a block of 6 flats on a site adjoining 88, Galsworthy Road, N.W.2. (b) Town Clerk, Town Hall, Haverstock Hill, N.W.3, with statement of work already carried out. (d) Oct. 4.

**LUTON B.C.** (a) Erection of 19 garages in Bloomfield Avenue, 7 garages in Marshall Road, 9 garages in Hallwicks Road and 25 garages in Friars Way. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Oct. 13.

**MAELOR R.C.** (a) Erection of 4 houses at Worthenbury. (b) Messrs. H. Anthony Clerk, F. C. Roberts and Partners, 41, Regent Street, Wrexham. (c) 2gns cheque payable to Council. (d) Oct. 17.

**NORTHAMPTONSHIRE C.C.** (a) Erection of Deanshanger modern school, Gulsborough modern school, and Weston Favell primary school. (b) County Architect, County Hall, Northampton. (d) Oct. 4.

**N. IRELAND—DOWN E.C.** (a) Erection of new primary school at Hillsborough. (b) Mr. Vincent B. Evans, 3, Bradbury Place, Belfast. (c) 5gns. (e) Oct. 13.

**N. IRELAND—MOIRA R.C.** (a) Erection of 12 dwellings and contingent works at Ballynadone, Maralin, Lurgan. (b) Council Offices, Lurgan. (c) 3gns. (e) Oct. 19.

**NORTHFLEET U.C.** (a) Erection of 20 houses, Painters Ash Estate. (b) Council's Engineer, Council Offices. (c) 2gns. (e) Oct. 27.

**NORTH RIDING E.C.** (a) Erection of new grammar and modern school at Stokesley, nr. Middlesbrough. (b) Mr. F. Barracough, County Hall, Northallerton, or Messrs. Gollins, Melvin, Ward and Partners, 15, Manchester Square, London, W.1. (e) Oct. 24.

**SALE B.C.** (a) Erection of 54 dwellings at Gratrix Lane, No. 2 development, Contract B. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Oct. 17.

**SALISBURY AND WILTON R.C.** (a) Erection of 4 houses and site works at East Grimstead. (b) Council's Clerk, Council Offices, 26, Endless Street, Salisbury. (c) 2gns.

## BLAKEY

PATENT

### M E T A L   A N G L E   B E A D

Now has TWICE the Number of Perforations, giving TWICE the Strength of the Old Type.

New and really efficient.

No Shrinkage as in Wood Angles.  
Heavily Galvanised.

Great saving in Labour costs compared with Wood or Cement Angles.

Illustrated Brochure with full details on request



PATENT NO.  
PRO. 10832/54

**BLAKEY**  
Cabinet & Metal Works Ltd.  
61, SCOTLAND ROAD,  
NELSON

### R.I.B.A. AND T.P.I. QUALIFYING EXAMINATIONS C. W. BOX

F.R.I.B.A., M.R.San.I., A.I.Struct.E.

Courses of instruction by correspondence and personal tuition in studio including Testimonies of Study and Professional Practice.

115 GOWER STREET, W.C.1. Tel.: EUS. 3906

### London's Finest new & secondhand Valves ARCHITECTS PLAN CHESTS



## MODELS BY Est. 1883

John B. THORP

FOR  
TOWN PLANNING,  
PUBLIC BUILDINGS,  
ESTATES AND INTERIORS.

Telephone:  
HOLborn 1011

**MINTON TILES**  
FOR WALLS & FLOORS

MINTONHOLLINSLtd. Patent Tileworks, Stoke-on-Trent

**SCOTLAND—LEVEN.** (a) Erection of 48 houses at Broom site, Leven. All or separate trades. (b) Scottish Special Housing Association Ltd., 15-21, Palmerston Place, Edinburgh 12.

**SCOTLAND—STRANRAER B.C.** (a) Erection of a block of 15 flats at Foundry Lane, Stranraer. All trades. (b) Messrs. Moffatt and Wright, 51, Sandgate, Ayr. (c) Oct. 31.

**WEST BRIDGFORD U.C.** (a) Contract No. 9a. Erection of 16 houses and 14 bungalows on the Wilford Hill Estate (north). (b) Council's Engineer, The Hall. (c) 2gns. (e) Oct. 20.

**WEST BROMWICH B.C.** (a) Erection of an elderly persons' home at Yew Tree Estate. (b) Borough Surveyor, Town Hall. (d) Oct. 6. (e) Oct. 28.

**WESTON-SUPER-MARE.** (a) Erection of (1) 2 blocks of 6 flats on 2 sites and 3 houses on 1 site, at the junction of Earlswood Grove and Birchwood Avenue, Summerlands Estate, and (2) 1 block of 6 flats fronting Milton Road and 3 houses at eastern end of site. (b) Town Clerk, Town Hall. (d) Oct. 3.

## PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. ↑ denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

**KENSINGTON, S.W.** (1) Rebuilding south-east wing. (2) Natural History Museum. (3) Galbraith Bros. Ltd. 61, Bartholomew Close London, E.C.1. (4) £78,000.

**LONDON, W.C.** (1) Extensions to Tavistock Hotel. (2) Tavistock Square, W.C.1. (3) Mullen and Lumsden Ltd., 41, Eagle Street, London, W.C.1. (4) £400,000.

**BRISTOL CORPORATION.** (1) Blocks containing 168 flats, 2 Laundries, etc. (2) Lawrence Weston Estate. (3) Benson Bros. (Bristol) Ltd., 117, Ashley Down Road, Bristol, 7. (4) £322,385. (1) 52 flats, 72 houses. (2) Hartcliffe Estate. (3) Selleck Nicholls and Co. Ltd., St. Austell, Cornwall. (4) £184,355. (1) 80 "Wates" houses. (2) Withywood Estate. (3) Wm. Cowlin and Son Ltd., Bristol, 2. (4) £132,579.

**MANCHESTER.** (1) Television centre for Granada Theatres Ltd. (2) Quay Street. (3) J. Gerrard and Sons Ltd., Swinton, near Manchester.

**ST. THOMAS (DEVON) R.D.C.** (1) Council offices. (2) Southernhay East, Exeter. (3) T. B. Keate and Co., 348, Topsham Road, Exeter. (4) £43,527.

**HERTFORDSHIRE C.C.** (1) Library and police station. (2) Hemel Hempstead. (3) Wesley Builders Ltd., Wesley Avenue, London, N.W.10. (4) £84,889.

**LANCASTER B.C.** (1) 42 houses and bungalows. (2) Ridge Estate. (3) Nicholson and Wright Ltd., Willow Lane, Lancaster.

**ROtherham B.C.** (1) Shopping centre. (2) Kimberworth Park Estate. (3) C. Ernshaw (Rotherham) Ltd., 35, Coke Lane, Rotherham. (4) £69,000.

**CROYDON.** (1) Offices for Scottish Union and National Insurance Co. Ltd. (3) James Miller and Partners Ltd., 7, Suffolk Street, London, S.W.1.

**LONDON, CITY.** (1) Nine storey block of offices. (2) Gresham Street, Wood Street, etc. (3) Wates Ltd., 1258 London Road, Norbury, S.W.16. (4) £444,222.

**For Perfect insulation  
in one thickness use  
BLACK SHEATHING  
FELT**

*The Time-tested underlay for Mastic Asphalte Roofs & Floors*

One thickness of Black Sheathing Felt will provide perfect insulation, giving maximum time for hot asphalte to be worked easily and thoroughly. One thickness will give complete isolation from the screed.

Architects know that the three essentials for a perfect asphalte roof or floor are—good asphalte, good craftsmen, and Black Sheathing Felt Underlay. That is why they have been specifying B.S.F. since Edwardian times.



All rolls bear this sign. It is the architects and asphalters' assurance of top quality underlay. Accept no substitute for Black Sheathing Felt.

- PLEASANT TO HANDLE
- DOES NOT FRACTURE
- DOES NOT ABSORB MOISTURE
- DOES NOT SHRINK

**BLACK SHEATHING  
FELT**

**Specify and use it  
as the Underlay to Mastic Asphalte Roofs and Floors**

Manufactured by

Permanite Ltd., London ; John Rogers Ltd., Belfast ; D. Anderson & Son Ltd., Manchester ; Engert & Rolfe Ltd., London ; John Erskine Ltd., Belfast ; Robt. McCalmon & Sons Ltd., Belfast ; F. McNeill & Co. Ltd., London.



## THE INSIDE STORY

... of the layout of the services and construction of 19th-Century houses is most important for a successful conversion to modern requirements.

For over 60 YEARS we have carried out extensive maintenance and alterations to Georgian and Victorian houses in their Electrical and Building aspects so that our organisation has a wealth of experience which is almost unique. More and more, the need to convert these houses grows and has received Ministerial support. We would like to place this experience at the service of the profession and invite enquiries.

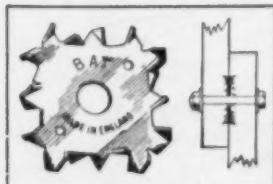
Members of  
L.M.B.A.  
and E.C.A.

**Rely on RAWLINGS BROS.  
for conversion work**

Head Office: 85 GLOUCESTER ROAD, SOUTH KENSINGTON, LONDON, S.W.7. Telephone: FREmantle 8161 (10 lines)

### THE PRODUCTS

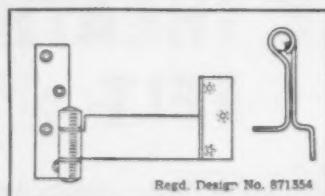
#### SQUARE TOOTHED PLATE TIMBER CONNECTORS



Modern structural timber design calls for the use of BAT Timber Connectors. Joints are doubled in strength. Timber sections are reduced. Rigidity is increased and weight saved by simplified designing.

#### IMPROVED DESIGN 'EASICLEAN' CASEMENT HINGES

Special feature is the Arm Design which allows for interchangeability with the STORM-PROOF Butt Hinge fitting. Other types include the E.J.M.A. Hinge to B.S. 644 and a light type.



PRICES AND SAMPLES ON APPLICATION

Sole Manufacturers:

**AUTOMATIC PRESSINGS LTD**  
BAT WORKS · BLACKHEATH · BIRMINGHAM

#### flooring for every purpose

- Jointless Composition
- Rubber Flooring
- Linoleum
- Thermoplastic Tiles
- Uneven sub-floors screeded to receive carpets, linoleum or rubber flooring

Phone or write for samples. Estimates gladly given and completion dates can be relied upon

#### early delivery

**THE VEITCHI COMPANY LIMITED**

flooring specialists

**LONDON** - Chiltern Works, Southey Road, Tottenham, London, N.15.  
Tel : Stamford Hill 9428

**LIVERPOOL** - 106 Brasenose Street, Bootle, Liverpool, 20.  
Tel : Bootle 3597

**GLASGOW** - 217 West George Street, Glasgow, C.2.  
Tel : Glasgow Central 1096

## SANDERS Latest Comprehensive Catalogue

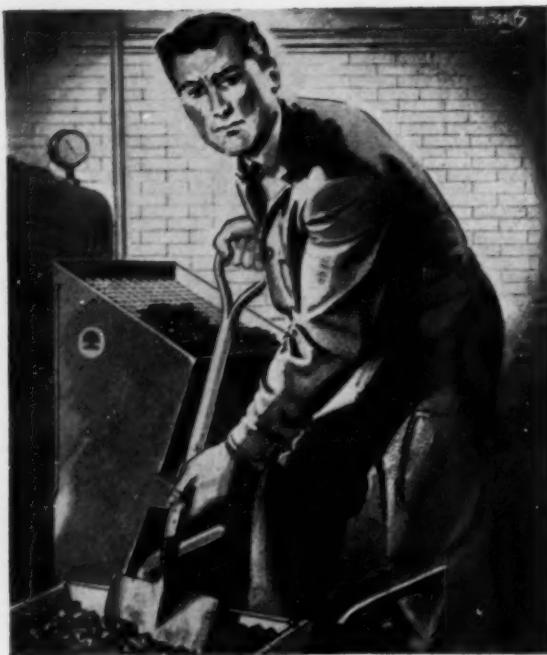


If your copy has  
not reached you  
through the post  
please let us know



**SANDERS**  
WEDNESBURY

WM. SANDERS & CO. (WEDNESBURY) LTD., WEDNESBURY, STAFFS.



## Heating the sky, Mr. Cole?

Unless your building is properly insulated against heat losses a good deal of the fuel bought for next winter will be wasted into the atmosphere. Heating the sky, in fact. Efficient insulation can not only save money, but add to comfort also—all the year round.

STILLITE mineral fibre products are available in various forms for the thermal and acoustic insulation of houses, flats, offices and public buildings of all kinds. And not only is STILLITE economical—it's everlasting, too.

*Complete technical information is freely available and our experts will advise on the choice of STILLITE products for specific purposes.*

**STILLITE**

**MINERAL FIBRE INSULATION**

Stillite Mineral Fibre is :  
inorganic, fireproof, odourless, chemically  
stable, non-corrosive, and non-deteriorating.

**STILLITE PRODUCTS LIMITED**  
15 WHITEHALL, LONDON, S.W.1.

Telephone: WHitehall 0922/6. Telegrams: Stillomite, Parl, London

## MODERN SASH WINDOWS...



See Stand No. 505 & 507 National Hall  
Gallery, Building Trades Exhibition,  
Olympia, November 16—30.

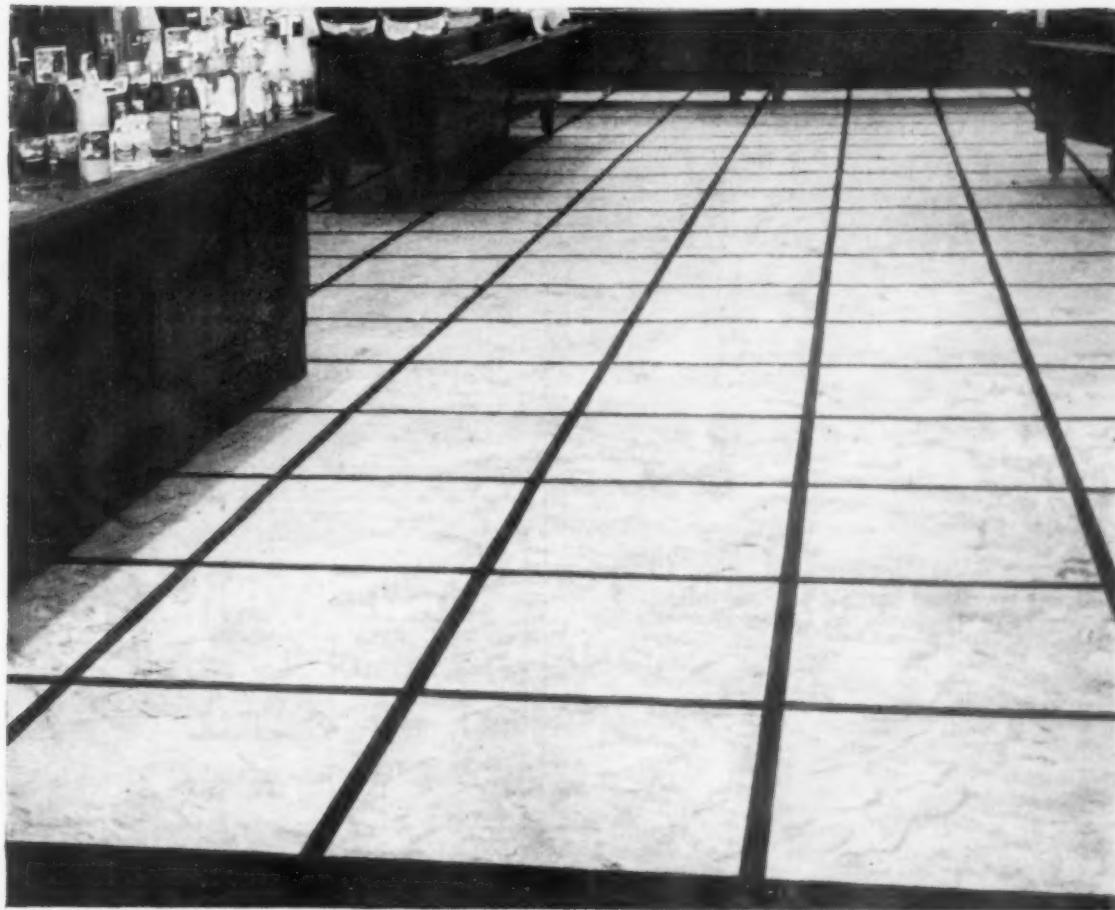
Full particulars from

**UNIQUE BALANCE CO. LTD.**  
YEOVIL

Telephone - - - - - Yeovil 2231-2

# Barry's Heavy Ruboleum

MONARCH OF THE LINOLEUM WORLD SINCE 1907



Reproduction of a RUBOLEUM Floor in a Food Store

**HEAVY RUBOLEUM** is a superfine linoleum 6.70 mm. thick (approx.  $\frac{1}{4}$ "), was first produced by us in 1907, and still holds its position of the highest merit as a floorcovering because of its properties of hygiene, resilience, durability and decorative colourings.

**HEAVY RUBOLEUM** is produced in 35 beautiful and popular colours, plain and marble effects.

SAMPLES ON APPLICATION TO THE EXCLUSIVE MANUFACTURERS

**BARRY, OSTLERE & SHEPHERD, LTD.**  
KIRKCALDY • SCOTLAND

**HEAVY RUBOLEUM** is especially produced for use on Ship decks and Public buildings. It is available through high-class retail Furnishers and Contract Flooring Specialists.

**HEAVY RUBOLEUM** is the solution to your flooring problems



I'm all burnt up!

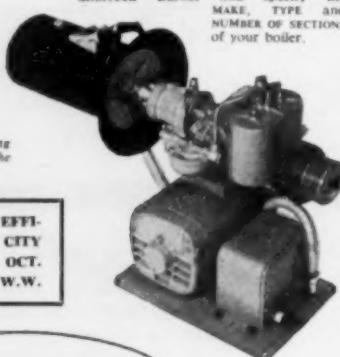
That, in a contemporary nut shell, sums up the Shorrock Oil Burner. Quite unlike any other firing equipment, the Shorrock Burner employs a system of complete carburisation, converting the oil fuel into a combustible gas (as against the usual oil mist).

There is no carbonisation or clogging of jets, no smoke or smell. Highest heat output is achieved without any fuel wastage. These and other unique Shorrock features puts this Oil Burner at the top of its class.



*This Architect says:*  
I specify Shorrock Oil Firing units because they are the best.

**MODEL SD 2**  
Output 60,000-320,000 B.Th.U. per hour. Write now for details of the Shorrock Burner and specify the MAKE, TYPE and NUMBER OF SECTIONS of your boiler.



See us at the FUEL EFFICIENCY EXHIBITION, CITY HALL, MANCHESTER, OCT. 12th to 22nd. SECTION W.W.

**SHORROCK**

**SHORROCK SUPERCHARGERS LTD.**  
Manufacturers of Superchargers and Oil-firing Equipment  
**EXPRESS WORKS, WALSALL RD., WILLENHALL**

Tel: Willenhall 737

Member of the Owen Organisation

## 'CALLOW ROCK'

### Gas-burnt WHITE LIME

is a Non-hydraulic, Class A  
Quicklime for Plastering  
Finishing Coat, Coarse Stuff  
and Building Mortar,  
conforming to British Standard  
Specification No. 890-1940

**The Callow Rock Lime  
Company, Ltd.  
Cheddar, Somerset**

Telephone :  
ENField 4877/8

Telegrams :  
Quality, Enfield

**SHUTTER CONTRACTORS LTD.**

**LINCOLN WORKS**

**ENFIELD**

**MANUFACTURERS OF**

*Quality*

**ROLLING SHUTTERS  
IN STEEL, WOOD &  
ALUMINIUM ALLOY  
FOR ALL TYPES OF BUILDINGS**

**APPROVED MANUFACTURERS TO  
F.O.C. AND L.C.C. REQUIREMENTS**

**CONTRACTORS TO  
H.M. GOVERNMENT—ALL DEPARTMENTS  
PUBLIC UTILITY COMPANIES, COUNCILS  
PRINCIPAL RAILWAYS, INSTITUTIONS  
Etc.**

putting the seal on the contract

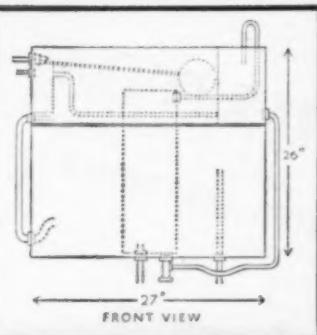
# IONOLAC

## BITUMINOUS PAINT

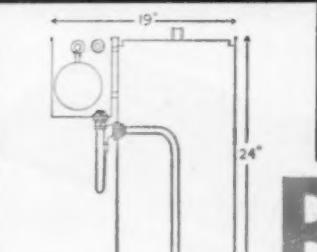
Blistering paintwork and insidious rust patches appearing on recently completed constructions ruin reputations. Shabbiness can be avoided with the use of Ionolac, a hard-wearing bituminous paint which provides long and complete protection against rust, chemical corrosion, and atmospheric conditions, yet is available in superior high-gloss finishes. We shall be pleased to submit leaflets and shade cards for the full range of attractive colours.



**DUSSEK BROTHERS & CO., LTD.**  
THAMES ROAD, CRAYFORD, KENT.  
Telephone: Bexleyheath 2000 (5 lines)



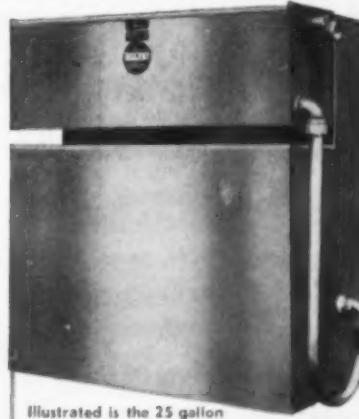
THE CALORIFIER



THE DURHAM

## A BIG saving on installation costs

Rolyat tanks represent a saving all along the line, quite apart from the extra quality which is built into them. Special tanks are made for awkward situations at no extra cost, and an advisory service is at your command for any installation. They are specified by local authorities, Architects and Heating Engineers throughout the country.



Illustrated is the 25 gallon "Rolyat" recessed "Durham" tank. Please send me details of the range of "Rolyat" tanks.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

A/I

# ROLYAT TANKS

PATENT  
HOT WATER

THE ROLYAT TANK CO. LTD. CROMWELL RD. YORK



# Helmsman STEEL CLOTHES LOCKERS

Left—

**STANDARD SIZE 72" x 12" x 12"**

Fitted with modern streamlined "Slidex" Chromium plated handle with 3 point latching, lockable with padlock (Traditional 6-lever lock in lieu or in addition if required). Other sizes 15", 18", and 20" deep (the last two sizes have rails for coat hangers).

LIST PRICE (in nests of 4) £3. 19. 3 (per Locker) (Single £4. 6. 9)

Right—

**FOUR-TIER LOCKERS**

Size of each compartment approx. 16" high, 12" wide, 12" deep.

LIST PRICE £2. 1. 0 (per compartment) £8. 3. 3 (per Locker)

*As manufacturers we can offer:*

Discounts for quantities • Special quotations for complete installations • Normal commercial credit terms to business undertakings • Prompt delivery • Choice of six colours.

Also Two-tier Lockers • Open-type Shelving • Closed-end Shelving • Solid Back and Sides Shelving • Bin Units • Cupboards • Work-Cabinets • Airing Lockers.

FREE DELIVERY, LONDON AREA



Mr. QUIN at  
Larkwood 4411 will  
answer your enquiries

# W·B·BAWN

& COMPANY LIMITED

BYRON WORKS, BLACKHORSE LANE, LONDON, E.17



**QUALITY AT THE RIGHT PRICE!**

## THE FACULTY OF ARCHITECTS and SURVEYORS

(with which is incorporated the Faculty of Surveyors of England)

**Incorporated (1926) as a Professional Centre**

### ARCHITECTS

Corporate membership is available to Architects registered in the United Kingdom and Overseas.

### SURVEYORS

Examinations are held bi-annually in the following sections: Building, Land, Valuation, Municipal, Quantity, Hydrographic, and Urban and Rural Estate Management.

**Important Note:** Certain concessions in respect of admission to membership on practice qualifications from Surveyors engaged in the profession will apply for a limited period.

Further particulars and application forms may be obtained from

The Secretary (J),  
68, Gloucester Place, London, W.1.

Telephone: WELbeck 9966.

Over 75 years  
experience and worldwide  
reputation for quality

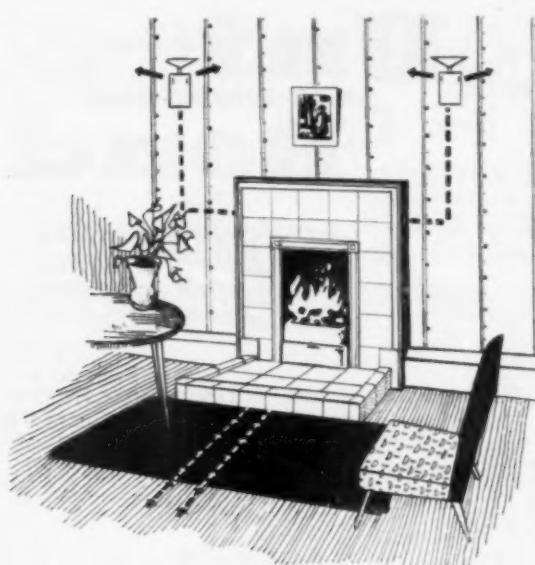
TECHDRY INK  
DRAWING INSTRUMENTS  
MINERVA SERIES PROFESSIONAL QUALITY  
JAYWESS SERIES STUDENT QUALITY  
KINWEST SERIES SCHOOL QUALITY



Write for  
illustrated leaflets  
and address  
of your  
nearest stockist to

A.G. THORNTON LTD.  
P.O. BOX 2, WYTHENSHAWE, MANCHESTER

MANUFACTURERS OF FIRST QUALITY DRAWING INSTRUMENTS  
P.I.C. SLIDE RULES AND DRAWING EQUIPMENT



*Open fire radiation  
uniform space heating . . .*

With Dunn's AIRDUN Convector Fire you have the best of two systems of heating. Primarily, you have all the advantages of the traditional open fire—including radiant heating and economy control. In addition to this you have a continuous flow of warm convected air entering the room from grilles situated in the wall or fireplace. (In the example illustrated the grilles are concealed behind light fittings in the wall.)

The AIRDUN Convector has several applications and is especially suited for heating other parts of the house from the one fire.

**AIRDUN CONVECTOR FIRE**

*For full technical details write to the manufacturers who will be pleased to advise you on your specific heating problems.*

**ALEXANDER DUNN LIMITED**  
Bothwell Road, Uddingston, Lanarkshire. Tel.: Uddingston 500

## *Ruminations on ROOFS...*

We do not claim that THERMACOUST Channel Reinforced Roofing Slabs will do a dozen different jobs. They were designed and developed *essentially* for ROOFS. And for roofs, flat or pitched, felted or tiled, they cannot be surpassed.

### STANDARD TYPE

*No other insulating roofing material has greater structural strength. Supplied in large, lightweight, easily handled units; fire-resistant, sound absorbing, their attractive surface requires no ceiling-finish.*

# Thermacoust

**CHANNEL REINFORCED  
WOOD WOOL SLABS  
are the BEST**

### REBATED TYPE

*THERMACOUST  $\frac{3}{8}$ " Rebated Slabs provide higher overall insulation. They are specially designed for buildings where the atmosphere is exceptionally warm or humid. They are rebated to take  $\frac{1}{8}$ " cork strips to prevent condensation on the steel channels.*

T.18

*For information sheets and prices, apply to:*

**THERMACOUST LIMITED,**  
39 VICTORIA STREET, LONDON, S.W.1 (ABBEY 2738)



it's

**FIXED**

with

**BOND - ANYTHING - TO - ANYTHING**

Here's the most astounding bonding agent ever contrived. No more hacking for keying. Uni-Bond will bond cement/sand to old surfaces, of tile, rendering, compo, asphalt, also to Timber, Asbestos, Zinc, Lead, Cloth to Cloth, Glass. In fact it will Bond Anything To Anything to each and one another. For inside and external use.

We guarantee the material. It is quite impossible for any Works Engineer, Architect, Builder, Surveyor, not to have a use of some kind for Uni-Bond. Uni-Bond is ready for use—no mixing. Will store for up to two years, and is used cold.

# Uni-Bond



SEND  
FOR THIS  
BROCHURE  
TO-DAY!

Telephone  
Camberley 2263. Ext 2

There is nothing the same as Uni-Bond. Beware of substitutes. Uni-Bond is guaranteed.

LIQUITILE SUPPLY CO. (Dept. IEN) 48 HIGH STREET • CAMBERLEY • SURREY

**NATURALLY** resistant to damp



The Crested Grebe protects its floating nest against damp with a natural dampcourse. Nature too has given its feathers the protection they need for existence. Architects and Builders use these principles by specifying "Aqualite" the pure Bitumen Dampcourse that lasts as long as the structure.

**BRIGGS AQUALITE**  
**BITUMEN DAMPCOURSE**

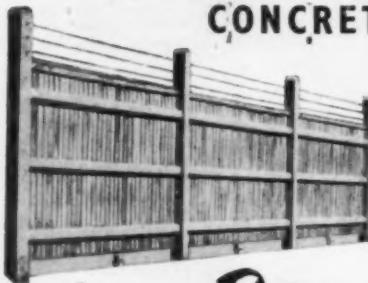
"Laid in a minute . . . lasts as long as the wall!"

WILLIAM BRIGGS & SONS LTD. DUNDEE.

BRANCHES THROUGHOUT THE UNITED KINGDOM

**A TIMBER FENCE ON A CONCRETE FRAME**

PATENT No. 536,241.



*Looks Better...  
...Lasts a Lifetime*

This is no ordinary fence that will rot and sag. The posts, gravel boards and rails are concrete, the latter having insets to which any type of filling in close, open or ornamental patterns can be nailed or screwed. We also manufacture and erect chain link, paddock, concrete, and cleft chestnut fencing, wrought iron and timber gates. We undertake erection in any part of the United Kingdom.

Descriptive catalogue on request.

**PERMAFENCE LIMITED**

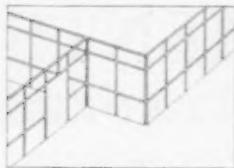
225/7 HIGH STREET, ACTON, LONDON, W.3  
Tel: ACORN 6035-6-7. Grams: Permafence Ealux, London.

**SAMUEL ELLIOTT & SONS  
(READING) LTD.**

TELEPHONE  
READING  
71536 (3 LINES)

*Elliott's of Reading*

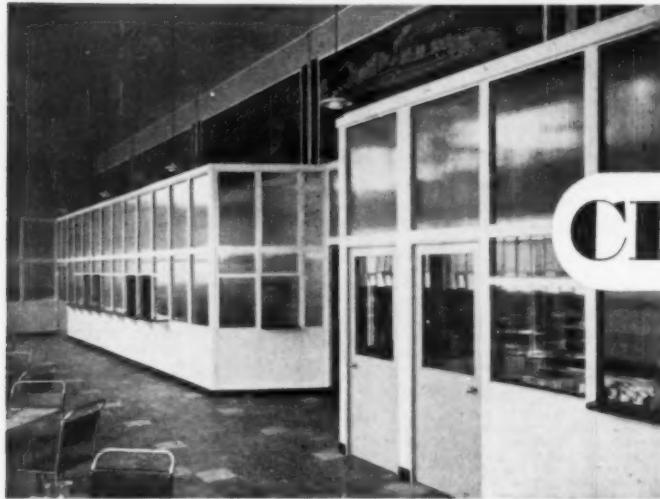
*Craftsmen in Wood and Metal*



# partitioning with flexibility

## FOR OFFICE AND FACTORY

The efficient utilisation of space to meet present and future needs in offices and factories is a problem which confronts most executives from



time to time. Chatwood Steel Partitioning provides a solution acceptable to the employees and planners alike in that it is clean in appearance without the clinical touch, gives an abundance of light, and has dimensional flexibility yet looks permanent. The partitioning is finished in a hard durable enamel to a choice of colours.

# CHATWOOD

## steel partitioning

Write for detailed leaflets to:-

THE CHATWOOD SAFE & ENGINEERING CO. LTD.,  
Steel Partitioning Division,  
3 Laurence Pountney Hill, LONDON, E.C.4.

SHREWSBURY · MANCHESTER · GLASGOW

# Waterproof

that leaky

roof with

# Aquaseal



From Builders' Merchants, or write to:

BERRY WIGGINS & CO. LTD., BREAMS BUILDINGS, LONDON, E.C.4



### CONTEMPORARY DESIGNS in DOOR FURNITURE



As suppliers of the Ironmongery for the ALEXANDRIA HOSPITAL Dunbartonshire to the instructions of the Architects, PAR 3828 Messrs. John Keppie, Henderson & J. L. Gleave we offer further contemporary designs of

### ARCHITECTURAL DOOR & WINDOW FITTINGS.

This small selection from our extensive range has met the approval of architects everywhere. Enquiries are invited for all types in Brass, Bronze, Iron or Aluminium.

Ask for special folder of  
Contemporary Designs C.D.422

### PARKER, WINDER & ACHURCH LTD.

422 Berkley St. Corner,  
Broad St.,  
BIRMINGHAM.  
(Midland 5001)

LONDON: 16 Grosvenor Place, S.W.1.  
SLOane 2232 & 2339  
MANCHESTER: 16 John Dalton St., M/12.  
BLACKFRIARS 9478.

# OFFICIAL ANNOUNCEMENTS

## APPOINTMENTS • CONTRACTS • TENDERS

Rate 1/6 per line, minimum 3/-

Close for press 1st post Monday for following Thursday Issue

### APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc. If the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

### WORCESTERSHIRE COUNTY COUNCIL

#### ARCHITECT'S DEPARTMENT

APPLICATIONS are invited for the following posts:—  
Assistant Architects — A.P.T. IV (£675-£825).  
Architectural Assistants — A.P.T. II (£560-£640). Application forms and further particulars should be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14 Castle Street, Worcester, not later than October 7th, 1955. (C.63). [1556]

### LONDON COUNTY COUNCIL

#### ARCHITECT'S DEPARTMENT

VACANCIES for Architects Grade III (up to £945), and Architectural Assistants (up to £783), for widespread construction programme which includes houses, blocks of flats, schools of all types, and various public and industrial buildings.—Application forms and particulars from Architect, (AR/EK/A/3), The County Hall, S. E. 1. (1189). [1006]

### WORCESTERSHIRE COUNTY COUNCIL

#### COUNTY PLANNING DEPARTMENT

ASSISTANT ARCHITECT (£650 x £25 - £775).

General architecture and planning experience required with qualifications R.I.B.A. and T.P.I. Car required.

Pensionable; medical examination.

Application forms from the County Planning Officer, County Buildings, Worcester. (C.190). [1589]

### URBAN DISTRICT OF EAST BARNET

APPLICATIONS are invited for the following permanent appointments:—  
(a) Assistant Architect—Grade A.P.T. III (£600-£725 per annum).

(b) Draughtsman (Architectural)—Grade A.P.T. I. (£500-£580 per annum).

Salaries will be increased by London Weighting of £20-£30 per annum, according to age.

Housing accommodation will be provided for the appointment of Assistant Architect, if necessary.

Conditions of Appointment and Forms of Application, returnable by 20th October, 1955, may be obtained from the Engineer and Surveyor, Town Hall, Station Road, New Barnet, Hertfordshire. [1595]

### COUNTY BOROUGH OF GREAT YARMOUTH

#### APPOINTMENT OF SENIOR ASSISTANT ARCHITECT.

APPLICATIONS are invited for the above appointment in the Borough Engineer's Department at a salary within A.P.T. Grade V (£750-£900). Applicants must be A.R.I.B.A. with wide experience in the design and administration of large contracts for specialised buildings carried out by a local authority. Preference will be given to applicants having experience in new library buildings.

HOUSING ACCOMMODATION WILL BE MADE AVAILABLE.

Applications, giving names and addresses of two referees and stating age, professional training, qualifications, experience and present and previous appointments with salaries, must be sent to me in an envelope endorsed "Senior Assistant Architect" to arrive not later than the 10th October, 1955.

FARRA CONWAY,

Town Clerk,  
Town Hall,  
Great Yarmouth,  
22nd September, 1955. [1594]

LONDON office requires experienced architects for supervisory duties. Posts available at £1,000 and £1,400 per annum. Car facilities or expenses will be paid and the successful applicants will be required to control large contracts. All applications will be dealt with in absolute confidence and the applicants should reply with full particulars of their training and experience and should state for which post they are applying.—Box No. 4425, c/o A. & B. N. [1536]

### APPOINTMENTS—contd.

#### COUNTY BOROUGH OF EAST HAM

CHIEF QUANTITY SURVEYOR — Grade V (£750 - £900).  
ARCHITECTURAL ASSISTANT — Grade II (£560 - £640).

LONDON Weighting is paid in addition. Salary in excess of the minima may be paid according to qualifications and experience.

Subsistence allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by October 14th, 1955, from the Town Clerk, Town Hall, East Ham, E.6. [1591]

### LONDON COUNTY COUNCIL

#### ARCHITECT'S DEPARTMENT

VACANCIES for Architectural Assistants for work in connection with either the maintenance or recording of buildings of architectural and historic interest. Commencing salaries up to £783 a year, according to qualifications and experience. Particulars and application form, returnable by October 14th, from Architect (AR/EK/HB/4), The County Hall, S.E.1. (1523). [1593]

AIR MINISTRY Works Design Branch require in London and Provinces (with liability for overseas service) ARCHITECTURAL ASSISTANTS experienced in planning/ preparation of working drawings and details for permanent and semi-permanent buildings. Salaries up to £850 p.a. (men) and £736 (women). Starting pay based on age, qualis, and experience. Paid overtime. Posts non-pensionable with long-term possibilities. Natural born British subject only.—Write, stating age, qualis, employment details, including type of work done, to any Employment Exchange, quoting Order No. BOROUGH 2303. [1379]

A SECTIONAL ARCHITECT required in the Office of the Architect to the British Transport Commission in London. Salary range £1,300/£1,500. Must be Associate R.I.B.A. with wide practical experience, able designer interested in contemporary architectural developments. Good draughtsmanship essential. Superannuation scheme. Certain free travelling facilities. Medical examination.

Write stating age, qualifications, experience, to Manpower Adviser, British Transport Commission, 222, Marylebone Road, London, N.W.1. [1580]

REQUIRED, quantity surveyor, able to prepare bills of quantities on own responsibility, to work South Midlands office, within 30 miles of London; living accommodation provided; state salary required.—Box 6724, c/o A. & B.N. [1597]

### ARCHITECTURAL APPOINTMENTS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc. If the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

ASSISTANT required in busy practice in West End, in early twenties, about intermediate R.I.B.A. standard, excellent opportunities for gaining all round experience.—Box 3851, c/o A. & B.N. [10636]

ARCHITECT'S ASSISTANT required for the London office of a firm of Architects with interests throughout the country, must be of Intermediate to Final R.I.B.A. standard. Superannuation scheme.—Apply in writing to Messrs. Cotton, Ballard & Blow, 133a, Wembley Park Drive, Wembley, Middlesex. [10007]

SENIOR and Junior Architects Assistants required for Staff Architects Department at Head Office of Dolcis Shoe Co. Inter. R.I.B.A. or equivalent standard required keen interest in temporary store design and enthusiasm for hard work. Canteen, Sports/Social Club and non-contributory pension scheme. — Please apply in writing to Dolcis Shoe Co., 7-13, Great Dover Street, S.E.1. [1528]

### ARCHITECTURAL APPOINTMENTS VACANT—contd.

MESSRS. Clifford Culpin & Partner require two assistants at approx. £650-£750 p.a., also two juniors at approx. £500. Interesting and varied work including Civic and office buildings, schools, multi-storey flats, etc. — Write 3 Southampton Place, W.C.1. [1535]

ARCHITECTURAL Assistants urgently required.—Fowler, Grove & Haigar, Chartered Architects, 140, Lodge Road, Southampton. [1545]

R. & D. HALL, F.A.R.I.B.A., Masonic Buildings, Bangor, North Wales, require: One Qualified Architectural Assistant and one Qualified Quantity Surveyor. Interesting work in pleasant area. Ability and energy essential with salaries accordingly. [1550]

EDWARD D. MILLS., F.R.I.B.A., requires additional assistants for interesting contemporary work.—Apply in writing with full details to 13 Castle Street, London, W.1. [1567]

ARCHITECTS' Assistants required in busy London Office. Salaries according to experience and qualifications.—Apply Richardson & McLaughlin, 13 Mansfield Street, W.1. Telephone Langham 5984. [1572]

SENIOR and Junior Architectural Assistants required. State age, qualifications, experience and salary required. Pyle & Saint, Chartered Architects, Thomas Street House, Cirencester, Glos. [1590]

ASSOCIATED LEAD MANUFACTURERS LIMITED require a qualified architectural assistant to their Northern Area Architect. This is a splendid opportunity for a responsible young architect requiring interesting and varied experience.—Applications, which must be hand-written, stating training, qualifications, experience, age and salary required, should be sent to M. Wilson, Dip. Arch., Dip.T.P., A.R.I.B.A., Crescent House, Newcastle upon Tyne, I. before October 10th, 1955. [1587]

HICKTON, Madeley and Salt require Senior and Junior Assistants. Pleasant office with a variety of interesting work. Salary according to age and experience.—24, Hatheron Road, Walsall. [1586]

SENIOR Architectural Assistant required, capable of developing from sketch plan to completion. General practice including factory, hotel, shop, office and domestic work. Knowledge of Quantities advantageous. Salary based on experience.—W. Richardson White, Chartered Architect, 23 & 33, Albert Street, Mansfield, Notts. [1581]

ARCHITECTURAL Assistant (male) required with practical office experience, for general practice in Salisbury.—Write stating experience, age and salary required to: Jacob & O'Farrell, F.A.R.I.B.A., 31, New Canal, Salisbury. [1583]

F.R.Y. Drew, Drake and Lasdon require senior experienced Architectural Assistants.—Apply in writing, with full details, to 63, Gloucester Place, London, W.1. [1592]

THREE Architect's Assistants of some years' good experience required for responsible work on important buildings. Commencing salaries £700-£900 according to ability.—Reply stating age, qualifications, etc., to V. O. Rees, F.R.I.B.A., 51 Queen Caroline Street, London, W.6. [1599]

### SITUATIONS VACANT

REPRESENTATIVE required, having good contact with leading Architects in South-Western Counties. Working knowledge of Fibrous Plaster desirable. Full particulars to—Box No. 6834, c/o A. & B. N. [1551]

IMPERIAL Chemical Industries Limited, Billingham Division, has a vacancy at Billingham for a Clerk of Works for the supervision of the construction of large building work. Age range 30-45. Candidates should preferably be Corporate Members of the Royal Institute of Chartered Surveyors, Building Section, or have a similar qualification. They must also have considerable experience on site supervision of all trades and of looking after building contracts and be capable of achieving first-quality finished work. Attractive salary and conditions of employment are offered.—Write, without commitment, for Application Form, to the Staff Manager, Imperial Chemical Industries Limited, Billingham Division, Billingham, Co. Durham, quoting reference G.4. [1582]

ASSISTANTS required to prepare sketch designs, working drawings and detailing for wide variety of projects. High standard of draughtsmanship essential. Previous office experience desirable.—Box 6670 c/o A. & B. N. [1588]

## SITUATIONS VACANT—contd.

**D**ESIGNER DRAUGHTSMEN or Architectural Assistant required for work in London office of firm's Architect. Previous experience in exhibitions and showroom design desirable. Must be good, neat draughtsman, fully conversant with building construction. Work is interesting and varied with prospects for the right man. Pension scheme. Salary by arrangement—Write stating age, experience and qualifications to S. M. Sternfeld, L.R.I.B.A., Pilkington Brothers Limited, 29-30, St. James's Street, London, S.W.1. [1584]

**STRUCTURAL ENGINEER**

required for  
DEVELOPMENT WORK & DESIGN  
in prestressed concrete construction.

Salary £600 to £1,000

depending on experience.

Apply giving details of qualifications and experience to  
**UDALLS PRESTRESSED CONCRETE LTD.**,  
West Quay Road, SOUTHAMPTON.  
Telephone: Southampton 26367. [1596]

## SITUATIONS WANTED

**S**ENIOR Assistant (Reg'd. Architect), desires  
spare-time work with London, Middlesex or  
Surrey Architects. Wide experience and high  
standard—Box 6032, c/o A. & B.N. [1598]

## PARTNERSHIP

**D**IP. Arch., A.R.I.B.A., aged 34, with experience  
of contemporary and traditional work, requires  
partnership. Capital available. — Box 6731, c/o  
A. & B.N. [1600]

## FOR SALE

**F**OR SALE — 32in single-feed Hall-Mark arc lamp  
Copying Machine, suitable for 230 volt D.C.  
electric current — E. Boydell & Co. Limited, Old  
Trafford, Manchester 16. Tel.: TRA 1641. [1585]

**S**ECOND-HAND 6,400 gal. Braithwaite Tank,  
16ft x 16ft x 4ft, with metal top and ladder.  
30ft Tower, 10ft x 10ft at base. Cleaned off and  
painted black. £550.

**COOKSLEY CHAIN MORTISER**, complete with  
chains and 5 h.p. electric motor, £90. — F. H. W.  
EKE, 37, Grove Road, Sonning Common, Nr.  
Reading, Berks. [1594]

## FOR SALE—contd.

**F**IRE Escapes, 3-storey, steel. Two redundant,  
approx. 9ft rises. Requires re-paint. Inspection  
invited. Cradley Heath warehouse.—Offers to J. P.  
Daynes Ltd., 3, Newhall Street, Birmingham, 3. [1595]

**COTSWOLD** Building Stone and Hardcore for sale  
at Fish Hill Quarry, Fish Hill, near Broadway,  
Worcestershire.

DELIVERED or collected from Quarry.

**A**PPLY to: Baillie, Brind & Co., Ltd., Prudential  
Chambers, Banbury, Oxon. [0082]

**A**LL hardwood mouldings, plain and embossed;  
embossed ornaments and dowels; send for  
catalogue and to-day's lowest trade prices.—Drew's  
Joinery Mills, Ltd., 60, Pownall Road, Dalton,  
2, Cheshire 1542/4. [0142]

**J**OINTLESS composition flooring in attractive colour  
range—quotations free.—Full particulars from  
the LioTEX Asbestos Flooring Co., Ltd., 3, Corbets  
Passage, London, S.E.1 (Dept. A), Bermondsey  
6341-2-3. [0622]

**R**ECONDITIONED ex-Army Huts & Manufactured  
Buildings. Timber, Asbestos, Nissen Type, Hall  
Type, etc. All sizes and prices. Write, call or  
telephone. Universal Supplies (Belvedere), Ltd., Crab-  
tree Manorway, Belvedere, Kent. Tel.: Erith 2948  
[0045]

## PLANT FOR HIRE

**F**OR HIRE, Ruston-Bucyrus EXCAVATORS,  
38RB, 33RB, 22RB and 19RBs. Any equipment  
— A. E. FARR, LTD., Westbury, Wilts.  
Tel.: 356. [0143]

## COURSES for all R.I.B.A. EXAMS

Postal tuition in History, Testimonies, Design,  
Calculations, Materials, Construction, Structures,  
Hygiene, Specifications, Professional  
Practice, etc. Also in general educational  
subjects.

## ELLIS SCHOOL OF ARCHITECTURE

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.  
103C OLD BROMPTON ROAD, LONDON, S.W.7.  
Phone: KEN. 4477. and at Worcester

## MISCELLANEOUS SECTION

**R**ATE: 1/6d. per line, minimum 3/-, average  
line 6 words. Each paragraph charged  
separately.

**BOX NOS.** add 2 words plus 1/- for registration  
and forwarding replies which should  
be addressed c/o "The Architect &  
Building News," Dorset House, Stamford  
Street, London, S.E.1.

**PRESS DAY** Monday. Remittances payable  
to Iliffe & Sons Ltd., Dorset House, Stamford  
Street, London, S.E.1.

No responsibility accepted for errors.

## SERVICES OFFERED

**A**rchitects, Surveyors and Contractors.—Our  
drawing office service is always available for the  
preparation of plans, designs, sketches, tracings and  
prints of houses, bungalows, stores, shops, structural  
alterations, furniture, interior decorations, signs and  
landscape gardens. Surveys, with photography, at  
any distance. Materials supplied, charges moderate,  
monthly accounts, strict privacy guaranteed.  
Quotations if required.—Allerton Studios, Designers  
and Draughtsmen, 14, Maley Avenue, S.E.27. Gip.  
3782. [0141]

**G**OOD lettering is essential for commemorative  
wall tablets, foundation stones, etc. Designs  
prepared and estimates given for the finished work  
in any suitable material. Renowned as a centre  
for lettering since 1934. Sculptured Memorials, 67  
Ebury Street, S.W.1. Sloane 6549. [0236]

**R**EGISTERED ARCHITECT desires spare-time  
employment by Architects in London or  
Middlesex areas. Good designer with wide experience.—Box 6566, c/o A. & B.N. [1599]

## AN INVALUABLE REFERENCE FOR THE ARCHITECT'S LIBRARY

# Structural Economy

## FOR THE ARCHITECT AND BUILDER

By GEORGE FAIRWEATHER, F.R.I.B.A.

This book is a critical analysis of traditional forms of construction, first identifying the main characteristics of buildings as determined by the materials and methods used in their construction. It then examines these characteristics in relation to their functions and the standards of performance required, and suggests improvements where these forms of construction fall short of present-day requirements.

For the purposes of this analysis, two basically different systems have been selected to re-

present the main features of traditional construction—masonry and light-frame construction. These are examined in several of their more common applications, and the limitations inherent in their use are identified. The present building laws are liable to restrict the full development of the new constructional methods, and the last chapter of the book summarises the regulations now in force, and suggests improvements.

21s. net. By post 22s. 3d.

Published for THE ARCHITECT & BUILDING NEWS

Obtainable from all good booksellers or direct from:

THE PUBLISHING DEPT., DORSET HOUSE, STAMFORD ST., LONDON, S.E.1

# INDEX TO ADVERTISERS

Official Notices, Tenders, Auctions, Legal and Miscellaneous Appointments on pages 44 and 45.

A.B.C.D. (Raynes Park) Ltd.	Crofield, Ltd.	Ibstock Brick & Tile Co. Ltd.	Rubberoid Co. Ltd., The
Adam & Lane & Neve Ltd.	Crudens Ltd.	Imperial Chemical Industries Ltd.	Rubery Owen (Shorrock Super-chargers) Ltd.
Adamsen Ltd.	Cullum, H. W., & Co. Ltd.	Johnson Bros. Ltd.	Rudkin, S. O., & Co. Ltd.
Adams Hydraulics Ltd.	Curfew Doors and Shutters Ltd.	Jones & Broadbent.	Runnymede Rubber Co. Ltd.
Adams, Robert (Victor), Ltd.	Cuthell, D. M., & Co. Ltd.	Jones, T. C., & Co. Ltd.	
Aerialia Ltd.	Cutting, R. C.		
Adam Hill, E., & Co. Ltd.	Dalton, Ballard & Co. Ltd.	Kay & Co. (Engineers) Ltd.	Sanders, Wm. & Co. (Wednesbury) Ltd.
Allied Brick & Tile Works Ltd.	Dennison Kett & Co. Ltd.	Kemp, Wm. (Refrigeration) Ltd.	Sankey, J. H., & Sons Ltd.
Allied Guilds	Denton Edwards Paint Ltd.	Kerner-Greenwood & Co. Ltd.	Schavenni Sheet Metal & Engineering Co. Ltd.
Allied Ironfounders Ltd.	Dexion Ltd.	King, J. A., & Co. Ltd.	Secomatic Ltd.
Ames Croft Mills & Co. Ltd.	Docker Bros.	Kings Langley Eng. Co. Ltd.	Semtex Ltd.
Anderson, C. F., & Son, Ltd.	Dodd Engineering Co. Ltd.	Kinnear Shutters.	Sherwood Floors Ltd.
Armstrong Cork Co. Ltd.	Doodson & Bain Ltd.	Laconic Products Ltd.	Shutter Contractors Ltd.
Ascot Gas Water Heaters Ltd.	Dunlop & Ranken Ltd.	Laird, John, & Sons Ltd.	Siegwart Floor Co. Ltd.
Associated Metal Works (Glasgow) Ltd.	Dunn, Alexander Ltd.	Lead Industries Development Council	Sissions, W. & G. Ltd.
Atlas Preservative Co. Ltd.	Durasteel Ltd.	Le Bas Tube Co. Ltd.	S.M.D. Engineers Ltd.
Atlas Stone Co. Ltd.	Duresco Products Ltd.	Light Steelwork (1925) Ltd.	Smith, Henry, & Co. Ltd.
Automatic Pressings Ltd.	Dussek Bitumen & Taroleum Ltd.	Lindsay's Paddington Iron Works (1948) Ltd.	Smith, Samuel, & Sons Ltd.
Avery, J., & Co., Ltd.	Dussek Bros. & Co. Ltd.	Lion Foundry Co. Ltd.	Smith, Thomas, & Sons Ltd.
Baldwin, Son, & Co. Ltd.	Economic House Drainage Eng. Co. Ltd., The	Liquitile Supply Co.	Smiths Fireproof Floors Ltd.
Barry, Outlere & Shepherd Ltd.	Edison Swan Electric Co. Ltd., The	Logical Fuel Storage Units	Solignum Ltd.
Bath & Portland Stone Firms	Eidelman, J.	London Electric Firm Ltd.	Sommerfields Ltd.
Batley, E., Ltd.	Electrolux (Model M.151).	London Brick Co. Ltd.	Soundproof Construction
Bawn, W. B., & Co. Ltd.	Elliott, Samuel, & Son (Reading) Ltd.	Lumenated Ceilings Ltd.	Southern Forge Ltd.
Baxendale & Co. Ltd.	Ellis, John, & Sons, Ltd.	Luxfer Ltd.	Spartan Beams Ltd.
Benham & Sons Ltd.	Ellis School of Architecture	MacAndrews & Forbes Ltd.	Staedler, J. S., Ltd.
Berite Ltd.	Empire Stone Co. Ltd.	Macartney Ltd.	Stainless Steel Sink Co. Ltd., The
Berry, J., & Sons	Engert & Rolfe Ltd.	Maple & Co. Ltd.	Standard Patent Glazing Co. Ltd., The
Berry Wiggins Ltd.	English Association, The	Margolis, M.	Stanley, W. F., & Co. Ltd.
Beynon, T., & Co. Ltd.	Eso Petroleum Co. Ltd.	Margolis, S.	Steel Radiators Ltd.
Black Sheathing Felt Campaign	Ewart & Sons Ltd.	Marley Tile Co. Ltd., The	Stelcon (Industrial Floors) Ltd.
Blackwells & National Roofings, Ltd.	Expanded Metal Co. Ltd.	Marryat & Scott Ltd.	Stevens, A., & P. Ltd.
Blackwell Wyckham Ltd.	Expanlite Ltd.	Masonite Ltd.	Stic B Paints Sales Ltd.
Blakely Cabinet & Metal Works Ltd., The	Faculty of Architects and Surveyors	McCarthy, M., & Sons Ltd.	Stillite Products Ltd.
Blundell-Spence & Co. Ltd.	Falkirk Iron Co. Ltd., The	Mather & Platt Ltd.	Stramit Board Ltd.
Bolton Gate Co. Ltd.	Farmer, S. W., & Son Ltd.	Mealing Bros. Ltd.	Stuart & Groves Ltd., Co. Ltd.
Boot, Henry & Sons Ltd.	Ferndale Ltd.	Medway Buildings & Supplies Ltd.	Swan, Wm. & Co. Ltd.
Boywick Gate & Shutter Co. Ltd.	Fibreglass Ltd.	Mellown & Co. Ltd.	Sun Insurance Office Ltd.
Bourne, F. H., & Co. (Engineers) Ltd.	Finch, B. & Co. Ltd.	Merchant Adventurers Ltd.	Sundae Board Co. Ltd.
Box, C. W.	Finlock Gutter Ltd.	Micklethwaite, W. H., & Co. Ltd.	Surfex Flooring Co.
Braby, F., & Co. Ltd.	Flavel, S. & Co. Ltd.	Minton Hollins Ltd.	Sussex Cement & Concrete Products
Bradford, F., & Co. Ltd.	Flexaire Ltd.	Moler Products Ltd.	Synchronome Co. Ltd.
Brady, G. & Co. Ltd.	Flexo Plywood Industries Ltd.	Morris Singer Co.	Tarmac Ltd., Vinculum Dept.
Brain-Arc Ltd.	Frank, Charles	Mullen & Lumsden Ltd.	Taylor Rustless Fittings Co. Ltd.
Bratt, Colbran, Ltd.	Franki Compressed Pile Co. Ltd., The	Murex Welding Processes Ltd.	Temflex Products Ltd.
Briggs, Wm., & Sons Ltd.	Freedman, Joseph, Sons & Co. Ltd.	Nairn, Michael, & Co. Ltd.	Temperature Ltd.
British Aluminium Co. Ltd.	French, Thos., & Sons, Ltd.	National Association of Master Asphalters	Templex Holdings Ltd.
British Constructional Steelwork Association	Gardiner, J., & Co. Ltd.	National Coal Board	Tenaplast Ltd.
British Ebonite Co. Ltd.	Gaskell & Chambers Ltd.	Newman, Wm., & Sons Ltd.	Terradura Flooring Co. Ltd.
British Electrical Dev. Assoc.	General Electric Co. Ltd., The	Noosie Ltd.	Thermocast Ltd.
British Electricity	Gibson, Arthur L., & Co. Ltd.	Nordmold Ltd.	Thermocore (G.B.)
British Hermesel Ltd.	Gimson & Co. (Leicester) Ltd.	Norris, C. W., Ltd.	Thom, J. Ltd.
British Metal Window Manufacturing Assoc.	Gliksten, J., & Co. Ltd.	Northare Organisation, The	Thompson, John, Beacon Windows, Ltd.
British Paints Ltd.	Grahamstown Iron Co. Ltd.	Northern Polytechnic	Thorn, J., & Sons Ltd.
British Plaster Board (Manufacturing) Ltd.	Graham, Thos., & Sons Ltd.	Norwood Steel Equipment (London) Ltd.	Thornton, A. G., Ltd.
British Plumber Ltd.	Grange-Camelion Iron Co.	Odini, A. A., & Co. Ltd.	Thornton, William, & Sons Ltd.
British Reinforced Concrete Engineering Co. Ltd., The	Granwood Flooring Co. Ltd.	Parker, Winder & Achurch Ltd.	Timber Development Association Ltd.
British Titan Products Co. Ltd.	Gray, J. W., & Co. Ltd.	Parmiter, Hope & Sugden Ltd.	Tretol Ltd.
Brockhouse Steel Structures Ltd.	Greenwood's & Airvac Ventilating Co. Ltd.	Parsons, Thos., & Sons Ltd.	Triano Ltd.
Bryce White & Co. Ltd.	Gulf Radiators Ltd.	Partide Wilson & Co. Ltd.	Troughton & Young (Lighting) Ltd.
Burn Bros. (London)	Gumenes Ltd.	Patent Glazing Conference, The 18, 19	True Flute Ltd.
Cafferrata & Co. Ltd.	Hale & Hale Ltd.	Penfold Fencing & Engineering Ltd.	Trussed Concrete Steel Co. Ltd.
Callow Rock Lime Co. Ltd., The	Hall, Harding, Ltd.	Permafence Ltd.	Turner, Chas., & Son Ltd.
Carborundum Ltd.	Hall, J. & E. Ltd.	Permanite Ltd.	Turners Asbestos Cement Co. Ltd.
Canada, Government of	Hall, Kay Ltd.	Philips Electrical Ltd.	Twiststeel Reinforcement Ltd.
Cannon, W. G., & Sons Ltd.	Halstead, James, Ltd.	Phoenixic Rubber Co. Ltd.	Tyrol Sales Ltd.
C. & P. Development Ltd.	Hammond & Channess Ltd.	Pickering's Ltd.	Unique Balance Co. Ltd.
Cape Asbestos Co. Ltd., The	Hartley Electromotives Ltd.	Pilkington Bros. Ltd.	United Merchants Ltd.
Carlisle Plaster & Cement Co. Ltd.	Harvey, G. A., & Co. Ltd.	Pilkingtons Tiles Ltd.	United Paint Co. Ltd.
Cellon Ltd.	Haskins	Pitman, Sir Isaac & Sons Ltd.	United Steel Companies Ltd.
Celotex Ltd.	Hatherward Ltd.	Planair Ltd.	Vaporheat Ltd.
Cement Marketing Co. Ltd.	Hawksley-SMD Ltd.	Pollard, E., & Co. Ltd.	Veitch Company Ltd., The
Chamberlin Weatherstrips Ltd.	Haywards Ltd.	Portable Concrete Buildings Ltd.	Vulcanite Ltd.
Chase Products Engineering Ltd.	Henley's W.T. Telegraph Works Co. Ltd.	Porter, F. W., & Soar Ltd.	Walker Crowell & Co. Ltd.
Chatwood Safe & Engineering Co. Ltd.	Hewitt, F. & D. M. Ltd.	Proctor & C. (Wireworks) Ltd.	Ward, Thos. W., Ltd.
Cheetham, A. J., Ltd.	Heywood, W. H., & Co. Ltd.	Pyrometals Ltd.	Wesley Trading Co. Ltd.
Cheetham, H. & Co.	Hilgert & Wall Ltd.	Radiation Group Sales Ltd.	West, A., & Partners
Churhouse, C. M., Ltd.	Hill, Aldam E., & Co. Ltd.	Ragussa Asphalt Paving Co. Ltd.	West's Piling & Construction Co. Ltd.
Clarke Ellard Engineering Co. Ltd.	Hills, F., & Sons Ltd.	Raines & Porter Ltd.	Wheatley & Co. Ltd.
Clark Hunt & Co. Ltd.	Hills (West Bromwich) Ltd.	Rainham Timber Eng. Co. Ltd.	Williams & Williams Ltd.
Claughton Bros. Ltd.	Hollland & Hannen and Cubitts Ltd.	Ranges Boilers Ltd.	Williams, John & Sons (Bristol) Ltd.
Clement Bros., Haslemere, Ltd.	Holophane Ltd.	Redpath Brown	Wood, Edward, & Co. Ltd.
Cloakroom Equipment Ltd.	Hole Fitting (G.B.)	Reliable Plywood Co. Ltd.	Wormells, R. J. & T. Ltd.
Clyde Structural Iron Co. Ltd.	Honeywell-Brown Ltd.	Reparations-Dreyfus Ltd.	Yale & Towne Manufacturing Co.
Coal Utilisation Council	Hope, Henry, & Sons Ltd.	Reynolds, H. L. Construction Ltd.	Yorkshire Copper Works Ltd., The
Colas Products (Sales) Ltd.	Hochkiss Engineers Ltd.	Richardson & Starling Ltd.	Youngman, W. C., Ltd.
Colthurst Symons & Co. Ltd.	Humber slate Co. Ltd.	Ringness Building Works Ltd.	Zinc Development Association
Compacotom Ltd.	Hunter, Douglas, Holland (Luxflex)	Roller Shutters Ltd.	
Condrup Ltd.		Rolyat Tank Co. Ltd.	
Conex-Terna Ltd.		Ronuk Ltd.	
Cork Manufacturing Co. Ltd.		Rubber Improvement Ltd.	
Costain, Richard, Ltd.			
Corsen Ventilators Ltd.			
Crittall Manufacturing Co. Ltd., The			

If no page number is quoted, please see previous pages.

CONCRETE CONTRIBUTIONS BY TWISTEEL



Reservoir, Cleaton, Northumberland. Engineer: A. G. McLellan, B.Sc., A.M.I.C.E., M.I.W.E., Sunderland & South Shields Water Co. Contractors: W. Moss & Sons Ltd.

To make sure of the highest standards in concrete design and construction, at the lowest cost in steel, money and time, call in the TWISTEEL Design Service. Their specialist knowledge, backed by many years of practical experience, enables them to advise architects and engineers, with certainty, on every aspect of design and planning for every type of construction involving the use of reinforced concrete: and they can also supply the reinforcement.

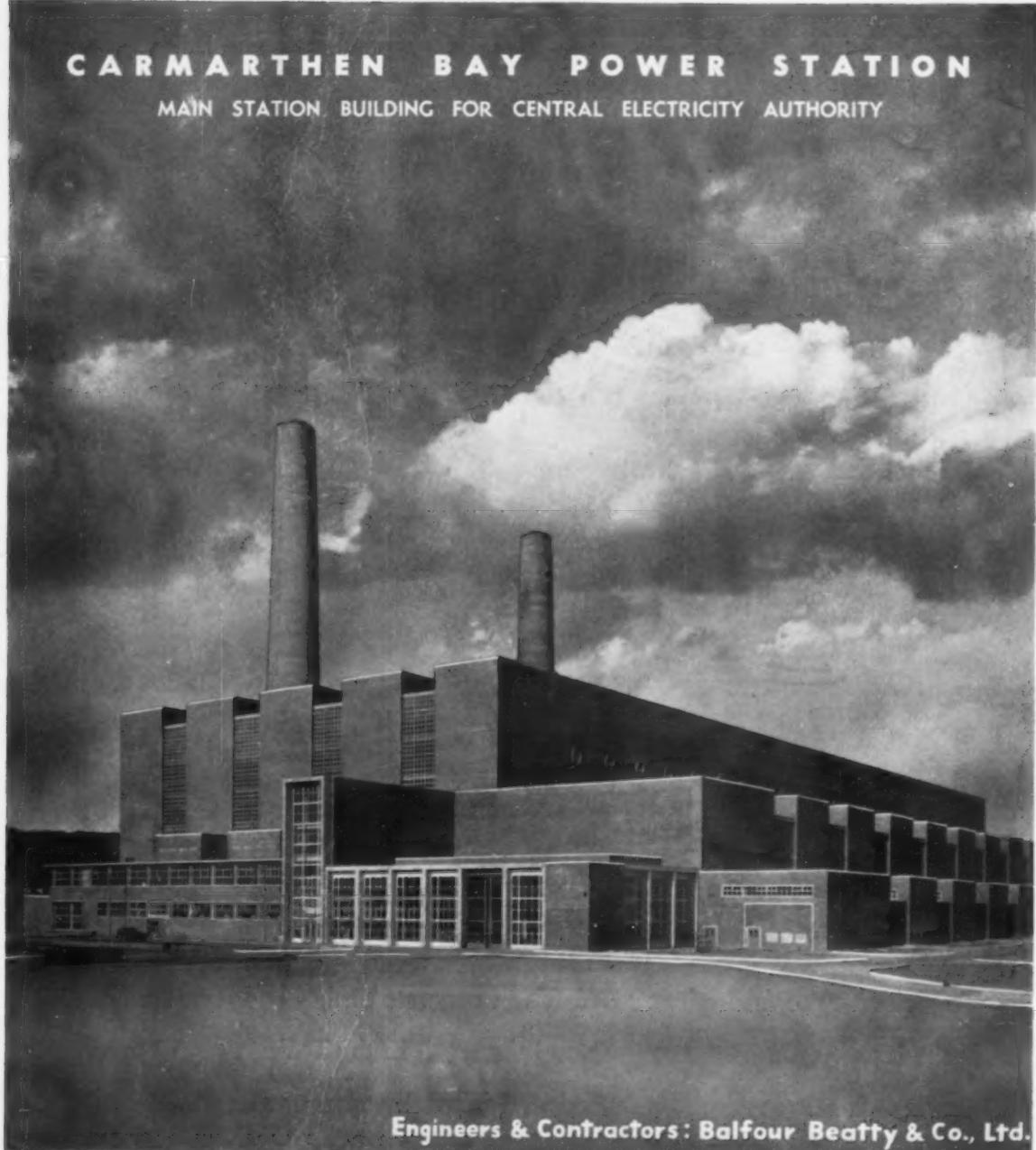
## **TWISTEEL DESIGN SERVICE**

43 UPPER GROSVENOR STREET, LONDON, W.1 • TELEPHONE: GROSVENOR 1216

AND AT BIRMINGHAM MANCHESTER GLASGOW

## CARMARTHEN BAY POWER STATION

MAIN STATION BUILDING FOR CENTRAL ELECTRICITY AUTHORITY



Engineers & Contractors: Balfour Beatty & Co., Ltd.

# ABERTHAW

THE RELIABLE

PORTLAND CEMENT

SOLE SALES AGENTS  
T. BEYNON & CO., LTD.  
EMPIRE HOUSE, CARDIFF

Grams: Beynon, Cardiff Phone: Cardiff 29431



LONDON OFFICE:  
BEVIS MARKS HOUSE,  
BEVIS MARKS, E.C.3

Grams: Beynon, Fen, London Phone: Avenue 2849